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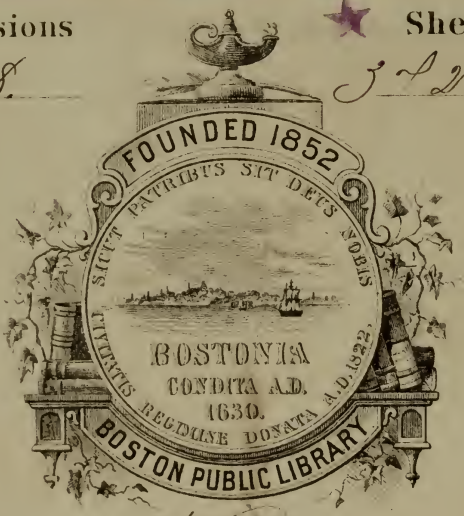

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THE NATURAL METHOD OF CUREING the Diſeaſes *of the* BODY, AND THE Diſorders *of the* MIND Depending on the BODY.

372 1, 2 2

In THREE PARTS.

Part I. GENERAL REFLECTIONS on the Oeconomy of NATURE in Animal Life.

Part II. The MEANS and METHODS for preſerving Life and Faculties; and alſo concerning the Nature and Cure of Acute, Contagious, and Cephalic Diſorders.

Part III. REFLECTIONS on the Nature and Cure of particular Chronical Diſtempers.

By GEO. CHEYNE, M. D. R. C. Ed. *and* R. S. S.

——*Extremam hanc oro veniam*—— VIRG.

The THIRD EDITION.

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Fred. H. Prescott
G. 808
May 24. 1854

TO THE

Right HONOURABLE

THE

Earl of CHESTERFIELD, &c.

FROM a Zeal for the Preſervation of his Lordſhip's Health, and in Honour of his eminent and ſhineing Endowments, theſe, probably his laſt Labours in Medicin, are humbly inſcribed by

His Lordſhip's

Moſt faithful humble Servant,

GEO. CHEYNE.

THE

PREFACE.

IN my *Eſſay* on *Regimen*, I promiſed the World my Thoughts concerning, *The natural Method of cureing the Diſeaſes of the Body, and the Diſorders of the Mind reſulting from ſuch Diſeaſes*, on the Principles of *Philoſophy* laid down in that *Eſſay*, which, by a Courſe of fifty Years Study, I have diſcover'd to be the moſt *Rational*, and in forty Years *Practice* of *Phyſic*, have found them to be the moſt *Effectual*.

THIS *Promiſe* I have in the *following Sheets* endeavour'd to perform, whether to the *Satisfaction* and *Benefit* of the *Public*, *Time* and *Experience*

 muſt

muſt ſhew. To a *Delicacy* of *Sentiments* and *Correctneſs* of *Style*, I have ſmall Pretenſions; to convey my own *Thoughts* to others, with as much *Plainneſs* and *Perſpicuity* as my Subject would admit of, has been my *principal View*; and if the ſerious attentive *Reader* finds himſelf inſtructed, the Intention of the Writer is anſwered, and his Credit, as a *Pen-man*, is of ſmall Import.

NATURE and her *Laws*, a competent Knowledge of the *animal Oeconomy*, and the beſt *Obſervations* which I have been capable of makeing on my own *Succeſs* in Practice, or on that of the ableſt of my *Profeſſion*, are the Foundation of every thing by me advanced. *Theory* I have given into as far only as ſeemed neceſſary to reconcile the *Method* and *Medicins* by me

me recommended, to the trueſt *Idea* which I could frame of the Diſtemper to be cured: For the reſt, the *Reader* is referred to the *Eſſay* above-mentioned, and its *Appendages*.

In a Deſign extenſive as this, it will not be expected that I ſhould deſcend either into *Forms* of *Medicins*, or the particular Circumſtances of every *Diſtemper* under Conſideration; this will be the neceſſary Duty of the *Phyſician* in ordinary, who, if he approves the general Directions by me given, will readily adapt them to any particular Caſe, its *Degrees* and *Symptoms*.

It cannot, I ſhould hope, give any reaſonable *Offence*, if in a Work of this Kind, many particular Things ſhould occur, which probably I may have

already advanced in ſome former *Treatiſes*; my *Apology* for which is, that in all I know of *Phyſic*, I have but one general *Syſtem*; *Nature* being ever *one* and the ſame, and proceeding in all *animal Functions* and Operations by the *ſame*, or at leaſt by analogous *Laws*.

WHAT I learned from *Books*, *Speculation* and *Philoſophy*, by Trial and Experience I have found to be greatly *defective*, as well in many Diſtempers, whereof I myſelf have felt the Weight, as in the Caſes of my *Patients*; and this *Experience* has led me to throw off all *unſucceſsful* Methods and *Medicins*, and to confine myſelf to *ſuch* only, by which I had Reaſon to think the principal *Point* in View, *viz.* a *laſting Cure*, might be obtained. This Method of proceeding reduces the

Practice

Practice of *Physic* into a narrow Compass, *viz.* 1°. To proper *Evacuations* of the several proper Kinds. 2°. To *attenuating* and *deobstruent* Medicins, of which I find the *mild ponderose* to be generally the best; and after a due Use of these, 3°. The gentle *Astringents* and *Strengtheners* of the Solids, 4°. A proper and *specific Diet*, with *Air* and *Exercise*.

THIS is my general *System*: This, if just and solid, brings all that can be pertinently said on the *Cure* of Distempers, into an easy and intelligible View, and makes many of the *same* Methods and Medicins common to different *Cases* and *Patients*. Whatever exceeds this, is *calculated* either for the easy Death, or to keep up the Courage and Hopes, of the *Patient*.

PREFACE.

IT would not become me to ſay, that the Method here laid down, how judiciouſly ſoever applied, will in every *Caſe* abſolutely cure or ſave: This, however, I venture to affirm, *viz.* that the Continuance of this Method for a due Time, has done, in very bad Caſes, and, by *GOD's Bleſſing*, will do more than any other which has yet been ſo ſtrongly and clearly enforced and explained, or is commonly uſed.

I MAY be deceiv'd myſelf, but, if I know my own Heart, have not a ſingle *Temptation* to deceive others. My *Age* is little ſhort of ſeventy Years, at which Time in Life, a *Thought* of adding to my *Reputation*, or to my *Purſe*, would be extreme Folly: The *firſt* is now at the Diſpoſal of the *Public*,

Public, the *latter* will ſoon be in the Hands of my *Executors*.

THESE Rules have I followed for twenty Years, firſt and laſt; and, by the *Mercy of Heaven*, am at this Time happy, in the Enjoyment of my Senſes, and the *Faculties* of *my Mind*, in their full *Vigour*.

BUT after all, though I ſhould *convince* the World, I muſt not expect to *convert* it: Leſſons of *Abſtinence* and *Self-denial* looſe their *Weight*, when offered to ſtrong *Paſſions*, and *high Spirits*; and the greateſt Part of my *Diſciples* will probably always be ſuch, as have labour'd through the tedious *Courſes* of *Phyſic* without Succeſs, whoſe Sufferings have ſoured the *falſe Pleaſures* reſulting from *ſenſual Appetites*, and who are at length willing to

renounce *Luxury*, in order to leſſen *Miſery*. To theſe I *ſeriouſly* affirm, that this *Method*, ſtrictly and for Time ſufficient purſued, will afford all the *Eaſe* which human *Art* can give, or human *Nature* receive; and as the *Time* is hourly ſtealing on, when *Art* can do no more, an Obſervance of theſe *Rules* will be the calmeſt and eaſieſt way of *lying down in Death*.

LET this ſingle Conſideration then recommend the *Syſtem* propoſed, *viz.* That it has a neceſſary Tendency to *alleviat* the *Pains* of *Life*, and to ſoften the *Terrors* of *Death*.

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A New Theory of acute and slow continued Fevers: Wherein besides their Appearances, and the Manner of their Cure, occasionally the Structure of the *Glands*, and the Manner and Laws of *Secretion*, the Operation of *purgative*, *vomitive*, and *Mercurial Medicines*, are *Mechanically* explained. To which is prefixed, an Essay concerning the Improvement of the Theory of *Medicine*. The Fourth Edition, corrected.

An Essay of the true Nature and due Method of treating the Gout: Together with an Account of the Nature and Quality of *Bath-Waters*, the Manner of using them, and the Diseases in which they are proper: As also of the Nature and Cure of most Chronical Distempers. The fifth Edition, enlarged to more than double the former.

Philosophical Principles of Religion, Natural and Revealed: In Two Parts. The first containing the Elements of Natural Philosophy, and the Proofs of Natural Religion. The Third Edition. The Second Part containing the Nature of Infinites, together with the Philosophic Principles of Revealed Religion.

An Essay of Health and Long Life. The Seventh Edition.

The English Malady: or, a Treatise of nervous Diseases of all Kinds, as Spleen, Vapours, Lowness of Spirits, Hypochondriacal and Hysterical Distempers, *&c.* In Three Parts.

Georgii Cheynæi, M. D. Coll. Reg. Med. *Edinb.* & Soc. Reg. *Lond.* Socii. Tractatus de Infirmorum Sanitate Tuenda, Vitaque Producenda, Libro ejusdem Argumenti *Anglice* Edito longe Auctior & Limatior, huic Accessit de Natura Fibræ ejusque laxæ sive resolutæ Morbis Tractatus nunc primum editus.

THE Natural Method *of* Cure In the DISEASES *of the* BODY, And the DISTEMPERS of the MIND Depending thereon.

PART I.

REFLEXIONS *on the* Oeconomy *of* Nature *in* Animal Life.

1. WE know nothing of the Subſtance, that is, the *Baſis*, of either material or ſpiritual *Qualities*; we know only their *Being*, and reaſon of their Nature from their *Qualities*, and their ſenſible Effects. It is certain that the *ſelf-motive* and *ſelf-active* Principle, or *ſpiritual Subſtance*, that actuates or animates *organiſed* Matter, muſt have eſſentially and actually inherent in it, all thoſe natural *Qualities*, *Faculties* and *Endowments*, in the higheſt *Perfection*, that it ever exerts or

attains to in any time of its Duration. To augment or increaſe in *eſſential* Qualities, is an Abſurdity; and to augment or increaſe *naturally*, is only the Property of *Body* and Matter: But ſpiritual Subſtance being indiviſible and immortal, if it could admit of *More* or *Leſs* in natural or eſſential Qualities, it might ceaſe *to be*, I mean as to its *natural* Qualities of *Living*, *Perceiving* and *Willing*, i. e. of *Cogitation* or *Thinking:* for as to its *moral* Qualities of *Juſtice*, *Goodneſs* and *Truth*, they may increaſe or decreaſe to any Degree, ſince they intirely depend on the *Free-will:* and therefore the natural Faculties of *Living*, *Perceiving* and *Willing*, and their ſeveral Degrees and Modifications of *Activity*, *Sagacity* and *Deſire*, are *eſſentially* and uniformly permanent in it, in their *Order* and *Degree* reſpectively, whatever kind of Body it animates; and when it does not exert theſe *innate* and *eſſential* Qualities, it is becauſe it is limited and reſtrained by the Nature of groſs Matter, and the *Laws* of the Body which it animates, which is a *foreign Impediment* inſuperable to its Degree of *Self-activity* and *Self-mobility*. For an *Angel* is as truly an *Angel*, as to its ſpiritual Nature and Faculties, *informing* the Body of a *Serpent*, or any other organis'd Body, as informing the Body of a *Man:* And an *Angel* animating a human Body, wou'd be only a more perfect *Man*; and by its natural and eſſential Qualities cou'd then only more perfectly exert *human* Functions and Operations:

And

And on an *unorganical* Body it cou'd produce no *vital* Functions, it cou'd only put it into particular Motions.

2. THE Body of an Animal is as perfect and complete in its *lumbaginous* and *ſpermatic*, as in its *adult* State, from the firſt *original Pair*, down to this preſent Time. In its *lumbaginous* State, with reſpect to its Body, it is, as it were, a mere *Plant*; in its *ſpermatic* State, it is but a Brute *Animal*; and it is only and properly a *Man* in its *adult* State, when its ſpiritual Faculties can act on its material Organs with the leaſt *Reſiſtance*, and when its material Organs are complete, develop'd, and cloathed with proper Incruſtation and Teguments, in which it continues but a ſtated Time. The *Skeleton*, *Hulk* and *Rudiments* of its Solids and Fluids, with all its *vital* and *animal Organs*, are ſimilar and *analogous* in all theſe ſeveral Stages of Being: It has the *Miniature*, *infiniteſimal* Solids, Fluids, and animal *Organs* and Functions, as real and perfect in its *lumbaginous* and *ſpermatic* State, as in its *adult* State, allowing for Circumſtances; for then its Solids are only *infinitely* ſmaller, more ſlender and delicate, *roll'd* up and folded together; and its Fluids *infinitely* more rare, thin and ſubtile; its Functions *infinitely* weaker and ſlower; and their Extenſion, Progreſs, and Increaſe, is *infinitely* ſmall in the Beginning, and for Ages may be inſenſible, like a ſlow *diverging infinite Series*, beginning

from *infinitely Little*; but *diverging* it muſt be, and always growing, living, and *verging* to its State, in a certain *Progreſſion*, and by *ſtated Laws*. For the Soul, or *ſpiritual Subſtance*, can only animate or actuate *divinely organis'd* Matter; and if in any Inſtant of Time the *infiniteſimal* Functions ſhould ſtop, the *Corpuſcle* wou'd ſoon putrify, or become an *inorganical* Particle of dead Matter, ſo as, without the Power and Activity of the *firſt Mover* and *Creator*, it could not be again made capable of *Animation*; which may be one Reaſon of the infinite *Waſte* of organis'd Seeds, or Beginnings of Life, conſpicuous in the World, from the *unpreciſe* Nature of groſs Matter, and the *infinite* poſſible Chances againſt the *Preciſion* neceſſary to living in this preſent State of Things.

3. The *firſt Man*, or the original and mediate Cauſe of the human Race, muſt either *virtually* or *actually*, either *explicitly* or *implicitly*, have had inherent in him, all thoſe natural Qualifications, Properties or Virtues both of Body and Soul, that ever were found in any of his Poſterity: Or before the Lapſe (to ſuppoſe it only here for Illuſtration) *Adam*, or the firſt of the *human Species*, before the Diviſion of the *Sexes*, (for it is plain from the Nature of Things, that the placing two *equal* human Souls, in only differently *figur'd* Bodies, muſt have been *poſterior* to the firſt original Deſign

Deſign of their Creation, if *final Cauſes* have any Evidence; for this Diviſion of *Sexes* ſuppoſes a Want or Deficiency, and a *begun Lapſe*, and could be no other than a *Prop* or *Buttreſs* to ſupport a ruinous Fabric; for it is highly probable, and conformable to the beſt *Natural Philoſophy*, that the Principle of Generation is only in the Male) I ſay, *Adam* muſt have had inherent in his original Frame, at leaſt the Meekneſs of *Moſes*, the Patience of *Job*, the Beauty of *Abſalom*, the Wiſdom of *Solomon*, the *Spirituality* and *Reſignation* of penitent *David*, and all the *Perfections* and *Excellencies* of the *Philoſophers*, *Lawgivers*, and *Heroes* of Antiquity, without their Blemiſhes; in a word, the *firſt Man* muſt have had exiſtent in him, either *actually* or *virtually*, all the *natural* and *moral* Accompliſhments and Endowments, that ever were exiſtent or conſpicuous in any of his Poſterity; with due Regard to their intended different Uſes and Ends in God's univerſal Monarchy; for the *Effect* can never riſe higher than the *Cauſe*, or the *Fruit* than the *Seed*, or the *River* than its *Source*. I think this muſt be very plain to a true *Philoſopher*, and is at the ſame time a *Demonſtration* of the *Lapſe* and *Degeneracy* of the preſent human Race.

4. For what wiſe Purpoſe the *Creator* of both Body and Soul has confin'd the actuating *immaterial Subſtance*, for ſo long a time, to ſo *dark* and ſtrait a *Priſon* as is this *ſeminal*

Corpuſcle, *viz.* all the time of its Duration from the Creation of the immaterial Spirit, and Formation of the organis'd Body, till it arrive at its utmoſt Extenſion and Maturity, is not readily conjecturable. We feel that in *Sleep*, the Spirit acts but imperfectly and partially in *Proportion* to its *waking* Action; in *Debauches*, very *inconſiſtently* and *unſteadily*; and in *Syncope's* and ſuch-like *nervous Paroxyſms*, ſcarce at all; and yet the *Eſſence* and real *Energy* or Capacity of the ſpiritual Subſtance is equally and uniformly the ſame, only the *organical* Machine is diſorder'd, and will not play. We can only therefore conclude, that poſſibly the *ſpiritual Subſtance* may be ſo long impriſon'd in its *Miniature*, *organical Corpuſcle*, for ſome moral End in the *Oeconomy* of *Providence*, either of *Purification* or *Puniſhment*; perhaps to *limit* and *concentre* the *natural Powers* to a *Level* with the laps'd and impair'd *moral* ones, that they may both riſe and grow up together equally. I mention all this but as Philoſophical Conjecture only.

5. ALL that the moſt perfect *Analyſis* Art can reach, is able to diſcover in the intimate Compoſition of Bodies, is, that they are compos'd, 1. Of Sulphur, Oil or Spirit, or the *Matter* of Fire. 2. Of *Salt*, or hard Particles, diſſolvible by Water only. 3. *Air*, or a thin elaſtic dry Fluid. 4. *Water*, or a more denſe, unelaſtic moiſtening Fluid. 5. *Earth*, a groſs unalterable

terable permanent Subſtance, the *Baſis* and Cement of the other Four. From the Mixture and Combination of theſe in different Quantities and Proportions, all the Varieties of Bodies and their Appearances may proceed.

6. THE great Principles of *Action* in Bodies, ſmall and great, *may be*, either, 1. *Attraction* or *Repulſion*, and its ſeveral Laws. 2. *Elaſticity* or *Reaction*. 3. *Fermentation*. 4. *Heat*, *Fire*, or its Matter and Cauſe. From what primary Cauſes theſe proceed, I do not here inquire; but that theſe are probably the *ſecondary* Cauſes of Action in all Bodies, there is no room for doubting.

7. IT is then highly probable, that an animal Body *divinely organiſ'd*, and fitted with *Inſtruments* to be actuated and animated by a *ſpiritual Subſtance*, the *Moment* after this ſpiritual Subſtance is breathed into it, or is united to this Body, becomes a *living* Animal, and not before; and then receives Nouriſhment, and performs the *Functions* of *Circulation*, *Perſpiration*, and the *Secretions analogically*, and by its proper Laws, in its *lumbaginous* and *ſpermatic* Condition, as really as it does afterwards in its *adult* State; and as it can have no Nouriſhment in the two firſt of *theſe* States, but from a Tincture or *Zeſt* of the Juices of the Parents, good, bad or indifferent, as they may be, and muſt fare accordingly; ſo it will

be *nouriſh'd*, *perſpire*, *reſpire*, and *ſecrete* in its adult State, according to the Nature and Qualities of what it takes in from the *Juices* and *Fluids* about it, and next to it, whatever they be, and however convey'd into its Habit and Subſtance.

8. In order to be nouriſh'd for ſome time, and perform the *animal Functions*, that is, to *live*, there ſeems to be no other *Condition* abſolutely neceſſary, but that the *Size* of the nouriſhing Particles be no greater than what will eaſily enter and paſs from the *receiving* Orifices to the *excretory* Orifices; or that the nouriſhing Particles be no bigger than the Mouths of the *vaſa inhalantia & exhalantia*; for were they bigger, it wou'd neceſſarily creat Obſtructions, Pain, and at laſt *Death*, or the Deſtruction of the *Machin*; it may be *leſs*, in any given Proportion; but it muſt not be *greater*; elſe it can neither readily enter, nor prompt the animal Functions without Violence and Pain.

9. To prevent Inconveniencies that may often happen from the *finite* and diviſible Nature of groſs Matter, from *infinite* Accidents, from the *Unſuitableneſs* of the neareſt Fluid, to perform the neceſſary Functions of living in *Animalcules* for any time, we ſee what an *Infinitude* of *organis'd* Particles of Matter, fitted for living in proper Circumſtances, the *Author* of

of Nature has provided in the *Seeds* of *Animals* and *Vegetables*, of which ſcarce *One* in many *Millions* can have all the favourable Circumſtances to bring it to *Maturity*. In *Plants* and *Vegetables*, theſe *organis'd* Particles are thereby fitted to become proper Nouriſhment for *Animals*, that there may be no real *Waſte* or Loſs in Nature, but all may tend to ſome infinitely *wiſe End* or *Purpoſe*. For *God and Nature do nothing in vain*; and when from the imperfect and limited Nature of *groſs* and *porous* Matter, and *Deficiency* of Circumſtances, they attain not the chief Deſign, they *chime* into a *Second* or a *Third*, or ſome one in the *infinite Chain* of Effects. And this Conſideration ſeems to me an evident Proof of *Pre-exiſtence*; becauſe every created ſpiritual Being, or individual Spirit, muſt at laſt find out a proper and peculiar material groſs Priſon to do Penitence in for a Time.

10. The Coat or Cruſt ſuper-induc'd on the primary *linear Stamina*, is intended to enable them to bear without Pain or Violence their future States, to ſheath, defend, and cover their Delicacy, extreme *Senſibility* and *Minuteneſs*, from the Coarſeneſs, Roughneſs, and Injuries of the Bodies that now ſurround us, in this *ruinous*, broken, coarſe State of our preſent Habitation. They are deſigned only for the *Time* of our *Duration* on this *ruinous Globe*; for finite Spirits have *Vehicles* of one Kind or other

other to *limit* their Powers, and by whoſe Reſiſtance and ſolid Obſtacle, they may *exert* their *ſelf-active* and *ſelf-motive*, now impriſoned corporeal Faculties; no Spirit but the *ſupreme*, the *Father* and *Creator* of Spirit and Matter, being capable, *it ſeems*, of acting at a *Diſtance*, or without the Mediation of ſome *organis'd* Matter.

11. THE *Wiſdom* and *Contrivance* of the Author of Nature, has by *general Laws* ſo order'd the preſent State of Things, that the external Superficies of the *Viſcera* are not only cover'd with ſpecial and particular Coats and *Membranes*, (which are the great Organs of their *Activity*) which defend them from the Injuries of the coarſe Solids or Fluids, or the *Element* we muſt live in, in this State; but each particular *Fibril*, each *infiniteſimal* Hair of an ætherial, or, as it were, ſpiritual Solid, has a particular Coat of its own, to defend the *linear Twig*, and convey Action and Impreſſion backward and forward; and the Whole is involved with a *Coat* or *Tunicle* of ſuch a Nature, that the coarſer and more compreſſing the ſurrounding Fluids are, the *thicker*, and more cloſe and compact this *Cover* or *Cuticle* mechanically grows, as we find by the *Palms* of the Hands and *Soles* of the Feet of Day-Labourers, and the *Cuticle* of the Poor and Naked; each *perſpiratory Gland*, each *ſecretory Duct*, ſending out a *Drop* of viſcous Matter,

ter, which the *Air* compreſſes, flattens and hardens into a *Scale*, to cover the Mouths of the ſubjacent *perſpiratory Gland*; which *Scale*, by a wonderful *Mechaniſm*, leaves its Mouth open, and yet defends it from the Injury of groſſer and ſharper Air, (like the Tiles of a Houſe) the *Element* of Land-Animals; and of theſe Scales, thick'ning according to Neceſſity, the human *Cuticula* is intirely compoſed. A *Mechaniſm analogous* to this is prepared for *Aquatics*, by a kind of *mineral* harder *Scales*, to defend the tender Fibres from the Injury of the *denſer* and heavier *Fluid* of *Water*, their *Element*.

12. THE ſame *analogous* Contrivance is provided for the Covering of the internal Superficies of the *Bowels* of Animals, (and beſides that, every original *linear Solid* has a Caſe or Sheath) where an *infinite* Number of *Glands*, by the Force of the animal Functions, are continually *ſpewing* out a more viſcous or craſſer Fluid, which becomes a Slime or *Mucus* to ſheath and defend them from the internal *Aura*, and their *Frictions* upon one another, and by its *Lubricity* to keep them (the *Membranes*) moiſt and *elaſtic*. And as this internal *Aura* is more delicate and leſs deleterious, than the external Element, this Cuticle or *Mucus* is ſofter and thinner; but there is an abſolute Neceſſity for ſuch a *Mucus* and Cuticle, to moiſten and ſheath their Delicacy and Senſibility, and therefore this *Cutis* is thinner: For one ſo coarſe

coarſe and groſs as the external Cuticle, would offend and hurt theſe tender Parts.

13. *LEWENHOECK* found Tubes in an animal Body ſo *ſmall* and *delicate*, that putting a common Hair, and one of theſe *Tubes* together, before the Object Glaſs of a Microſcope, he computed it would require 600 ſuch *Tubes* to be as big as the Hair. We know that every Point of an *Animalcul* is ſenſible, and that to Senſation there muſt concur an *Artery*, a *Vein*, and a *Nerve*. Every Point of our Cuticle throws off a Steam or an Air in a ſound State; the ſame *Lewenhoeck* found 125000 ſuch organis'd Orifices under a Space that a Grain of Sand would cover. All the *Membranes* conſiſt of Meſhes like Net-work, of different Forms and Figures: The Subſtance of the Fibres that compoſe the Solids we find to be cellular, or veſicular, like the Subſtance of a Sponge, or the Pith of a Ruſh, which Cells or *Veſicles* therefore muſt communicate or be patent one into another. * The learned Dr. *Porterfeild* very juſtly concludes from Dr. *Hooke*'s determining the *Minimum viſibile* under an *Angle* of one *Minute*, that the Magnitude of a ſingle nervous Fibre cannot exceed the 3600th Part of a common Hair. All the Tubes, Glands, and Cells of the Solids are filled with a thin glutinous Water, and theſe make the ſolid

* *Vide* Medical Eſſays, Vol. iv. p. 252.

Subſtance

Subſtance of the whole Matter of an Animal. Water and Mercury are the only ſenſible Fluids that can circulate, and enter in ſuch Tubes, tho' the laſt will do ſo but tranſiently, and only as a Cleanſer or Rammer to the Tubes.

14. THE *Organs*, the *Glands*, *Tubes* and *Fibres*, but eſpecially the *Membranes*, and other ſolid Parts of Animals, are the moſt *elaſtic* and *ductile* of any known Subſtance. They may be drawn and ſpun out to an inconceivable Length, even to a Length almoſt beyond Gold itſelf; which yet we know may be extended on the Surface of Silver-Wire, from a ſingle Grain to many Leagues in Length. Yet the *Ductility* and *Elaſticity* of *animal* Subſtances ſeems much ſuperior, and more delicate and fine than that of any Metal or Vegetable, as is evident in both theſe Qualities, from the Threads of a *Silkworm* and *Spider*, and from the Vibrations of *Cat-gut* in *Muſic*. *Impoſtumes*, *Schirrous Glands*, *Aneuriſms* and *Wens*, ſhew how much a ſmall Globule of animal Subſtance, eſpecially the *membranous* and *fibrous*, may be ſtretch'd before it burſt or break. All this ſhews at leaſt, that they are extremely fine, *ductile*, and *elaſtic*. But this Elaſticity lies in the Coat or Membrane, not in the *ſolid Content*.

15. THERE ſeems to be a *Medium*, or golden Mean, between the extreme *Minuteneſs* of ſome *Particles* of Matter, and the too great

great Coarſeneſs and Largeneſs of *others*, that is moſt proper for the Nouriſhment of animal Bodies, and beſt ſuited to our preſent Situation, and the Nature of the *Fluids* and *Solids* that ſurround us. For Inſtance, *Alcalious Salts*, which are only *porous* Earths (whether form'd and figured by chymical, ſolar, or central Heat, is not material) like a dry Sponge, being the Neſts, as it were, of *acid* Water, driven out of their *Pores* by great Heat, whence they are again render'd capable of receiving more of this *Acid* into their *Pores*, whither it is drawn and ſolicited by the remaining *Acid*; Theſe *Salts*, I ſay, wou'd be improper Food for any Animal: And here it may be obſerved by the by, the *Fermentation* with theſe *Acids* ariſes from their ruſhing with Velocity and Violence into theſe empty *Pores*, to fill their Vacuities. And the *Volatility* of thoſe *Salts* ariſes ſolely from a light *Oil* of *Sulphur* being added to them: So that *Alcali's* may be really nothing but dry'd *porous Earths*, with ſome remaining *acid Salt* in their Pores; which by its *Attraction* draws more *Acid*, to fill theſe Pores, when it comes within their *Sphere*; and *Salts* are made volatile by the Addition of light Oil. Both *acid* and *alcali* Salts are improper Nouriſhment, as well as improper Medicine for Animals, but where they are deſign'd to deſtroy one another. This may be the true *Theory* of Salts, and is conformable to the Experiments of the greateſt and beſt Chymiſts, *Newton*, *Boyle*, and *Geoffry*.

If

If then the Particles of our Food were reſolv'd into their primary indiviſible *Atoms*, ſuch as theſe, they wou'd not fit the *Ruptures* and *Chaſms* made in our Bodies by Action, and Living, and the conſtant *Abraſion* of the Fluids that ſurround us: And beſides, by their Solidity, and greater Degree of *Attraction*, when divided into their leaſt and laſt Particles, they would run into *Cluſters*, *cryſtalize*, or ſeparate into their ſeveral *elementary* Orders, by this then prevalent Degree of *Attraction*, and form Bodies of a Compoſition different from Fleſh and Blood. So that the very beſt nouriſhing Particles for animal Bodies, are thoſe of the *Third Order*, of a middling Compoſition and *Size*, of a rare, porous, and ſpongy Texture, or a *Medium* between Particles made of *Salts* and *Sulphurs*, and thoſe that partake more of the other Elements, of *Air*, *Water*, and *Earth*; or the ſmalleſt *integral* Particles of animal and vegetable Subſtances. And hence ariſes one Reaſon, why *fermented* Liquors, *Spirits*, and *diſtill'd* Fluids of all Kinds, are ſo *unfriendly* and deſtructive to animal Bodies.

16. For Diſtinction's ſake, we may conſider *three* Degrees of the *Size* of Particles in Bodies. *Firſt*, Thoſe which may be reckon'd the *firſt* and *leaſt*, which muſt neceſſarily be ſolid, compact, and indiviſible, at leaſt by any *finite* or natural Force or Art. And theſe ſeem to be the Particles that make the primitive

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Elements (firſt intended by the Author of Nature) already nam'd; *viz.* original *Salt*, *Sulphur*, *Air*, *Water* and *Earth*; and may be conſider'd as *unalterable*, and always the ſame. Perhaps their Figure may be triangular Priſms, Spheres, and Cubes, and their Combinations; thoſe being the moſt ſimple Solids, *and God and Nature never do any thing in vain*, or in a perplex'd manner. *Secondly*, Thoſe of the ſimpleſt Compoſition and Combination of theſe *elementary Particles*, ſuch as may be all our *Elements* produc'd by Art, wherein there is always a Mixture of all the other *Elements*, and which no *Art* can produce abſolutely pure and ſimple; of this Kind are our now *chymical* depurated and rectify'd *Salts*, *Sulphurs*, *Water*, *Air*, and *Earth*. *Thirdly*, The common Mixture or Product of the leaſt *integral* Particles, as we find them in Nature, and without Art, in *animal* and *vegetable* Subſtances, where theſe Elements are combin'd in different Proportions. It is of ſuch *Particles* that the *Author* of *Nature* ſeems to have made the Choice and *Peculium* for the Nouriſhment and Increaſe of animal Bodies, when divided into their ſmalleſt *integral* Parts, that our Bodies may thereby become *homogeneous*, and in ſome kind *ſimilar* to the Bodies and Fluids that ſurround us. For tho' *Chymiſtry* be a *noble* Art, and logical Inſtrument for natural *Philoſophy*, yet I can never think its Productions, of what Kind ſoever, or any of its *analyſed Fluids* or *Solids* impreg-

impregnated with the Subſtance and *Matter* of Fire, fit for animal Bodies, but likely to tear and deſtroy them ſooner; elſe, in all Probability, the *Author of Nature* would have provided them ready for us. We call theſe reſpectively *Particles* of the *Firſt*, *Second* and *Third* Compoſition.

17. NATURE's Laws are *general*, *uniform* and *ſimple*; and if they produce various Effects, and ſhew different Appearances, it is from different Circumſtances and Situations only. The higheſt Degree (for Example) of *Heat* our Bodies can bear without Pain or Hurt, is the ſame uſed for *Vegetation*, and not higher: greater Degrees of Heat, *actual* or *potential*, would rend and deſtroy them. The ſame Heat which ripens *Grapes*, and later Fruits, continuing to act on them when compreſs'd and confin'd, makes them *ferment*; whereby the Particles being diſengag'd and ſeparated, go into Action, and *verge* towards their ſeveral *Claſſes* and *Orders*, by their proper *Attraction* and *Gravity*; a great Part of the *earthy*, *airy*, and *watery* Particles being flung off, the Juices become *vinous*, and have a greater Proportion of inflammable Spirit thereby collected and united in them, and, in any great Quantities taken into animal Bodies, by their greater Proportion of *Salt* and *Sulphur*, and conſequent greater *Attraction*, (theſe Particles being now unſheath'd, and in an active State) muſt neceſſarily rend and tear them. The ſame *Law of*

Heat, *Attraction* and *Gravity* still continuing to act, if the *vinous* Juice be left open and at freedom, the *sulphureous* Particles, which are the most *volatile* and light, will fly off, and leave the Water and essential Salt, which will thus become *acetous*; and this *acetous* Liquor, treated by the Tortures of *chymical* Fires, will still throw off the few Remains of *Sulphur*, and a great part of the Water, and retain the material Particles of *Fire* and essential *Salts*, and so become *Spirit of Vinegar*, which in a great Quantity forced into animal Bodies, will act as a strong *Caustic* or rank Poison, by burning up the tender *Fibres*, and coagulating the Fluids, as all proper *Poisons* do by the same Laws and *Energy*.

18. WHETHER *Fire*, or the productive Cause of Heat, be a real specifically distinct and unalterable Kind of subtile Fluid, in itself inconvertible into any other Nature, but lodg'd in the Pores of other Bodies; or if it be only, which is most probable, the last and smallest *elastic* Particles of all Kinds of Matter, indifferently thrown off and excited into Action by violent Motion, is as yet undetermin'd, and of no great Consequence to ascertain, since on both *Hypotheses* its real Effects are the same. That it is the grand *Agent* in Body and dead Matter, and acts always in the *subduplicate* Proportion of its Distance, is certain. For the same Vegetables compress'd and closely confin'd, so that their

Sulphur

Sulphur and *Oil* cannot be carried off, when this *Oil* and *Sulphur*, by being bruis'd and concenter'd, or kept within a narrow Bound, is brought into an active State, by the Action of Heat alone, putrify, turn *mucilaginous* and *fœtid*, and have all the Appearances of *animal* Subſtances; which happens not when the Vegetables are expos'd to the *Air*, for then the *oleaginous* Particles would be carried off by it, and a Solution of the *eſſential Salts* remaining, they would turn only *acetous*. The *cadaverous* Smell, in the former Caſe, ſhews the Confinement of the *Sulphurs*; for it is well known, ſuch Smells (and indeed all Smells) are owing to *Sulphur*. And thus we ſee Nature's Law in Heat, from *Vegetation* to *Maturation*, from *Maturation* to *Fermentation*, *Acetation* and *Putrefaction* down to *Incineration*, is the ſame Action of Heat exerted only in different Degrees and Circumſtances; and that local Motion and Diviſion, is the only Action on Matter.

19. *ANIMAL* and *Vegetable* Subſtances differ chiefly in the Proportions of the *elementary* Principles of *Salt*, *Sulphur*, *Air*, *Water* and *Earth*, contain'd in them. In *animal* Subſtances, the two firſt (*Salt* and *Sulphur*) are predominant; in *Vegetables*, the three laſt. Not but that there are vegetable Subſtances, in which the two firſt are more predominant than in ſome animal Subſtances,

as in *Aromatics*, *oily Seeds*, *latter Fruits*, *Eaſtern Gums*, and the like; in which *Salt* and *Sulphur* predominate much more than in *Chicken*, *Veal*, *Lamb* and *young white animal* Subſtances; for in Animals, the *Salts* and *Sulphurs* abound moſt, as they verge towards *Maturity*, and enter upon the Age of *Generation*; and to the Abundance of them in length of Time, this State, or Paſſion, is in a great meaſure owing. But, generally ſpeaking, the Matter is as I have ſtated it, both in *Animals* and *Vegetables*; only *Vegetables*, in general, have more of the unactive, innocuous Principles of Air, Water and Earth in them; and *animal* Subſtances more of the active and deleterious Principles of *Salt* and *Sulphur*. Add to theſe this other material Difference, that the *Strainers*, *Glands* and *capillary Tubes* in *Animals*, are *infinitely* more in Number, and more fine and complicated than in *Vegetables*; and that, beſides the external *Heat* common to both, *Animals* have an internal Principle of *Heat* and *Action*, to divide, digeſt and attenuate the Particles of Aliment to a greater Degree of Subtilty and Minuteneſs, and conſequently to unite and combine animal Subſtances with greater Force; for *Fire*, like all violent Motion, divides firſt, and then their *attractive* Virtue *claſſes* and combines the *homogeneous* Particles.

20. FROM

20. FROM this Account of the *Laws* and *Operations* of Nature, and of the *animal Oeconomy*, it will not be difficult for a thinking Perſon, to chuſe the Foods moſt proper for *Health*, *long Life*, and the cleareſt Uſe of his Senſes and intellectual Faculties. It is moſt certain, the *human Race* has been, with infinite Wiſdom and Foreſight, fitted both for *Animal* and *Vegetable* Food, both of which will anſwer the mention'd *Conditions*, if not equally, yet ſufficiently and fully, when properly choſen. The *Rule* to go by in this Caſe, is, to chuſe in theſe two different kinds of Food, thoſe which are moſt eaſily *diſſolvible* into their *integral Parts*, that are leaſt *tenacious* and *coherent*, that are lighteſt in Weight, and moſt porous and crumbling, and that have the feweſt *Salts* and *Sulphurs* in their Compoſition, and abound moſt in the other Principles, whoſe Parts are leſs *attractive*, and will not ſo readily, when *analys'd* by the *animal Functions*, run into greater *Cluſters* ſo as to *cryſtalliſe*: and this will do all towards Life, Health and clear Faculties, that the Nature of groſs *Matter*, the Laws of *Mortality*, and the Ends of *Providence*, in our preſent Situation will admit.

21. THE *Strainers*, *Analyſers* and *digeſtive* or *ſecretive Organs* in Animals, are not the *Glands* only, properly ſo call'd, but the

converging *Arteries*, with their muſcular Coats and Ramifications, the *Lymphatics*, the *Valves* and *Inoſculations* of the ſeveral Tubes, with the infinite *Curvatures* and *Convolutions* of all theſe, which inſenſibly divide, ſegregate and claſs the ſeveral Juices and conſtituent Particles: But the moſt ſenſible and perceptible Secretions and *Analyſes*, are chiefly perform'd by the *Glands*; and to conceive their *Nature* and *Structure*, we need only conſider the *primary* great and viſible one of the firſt *Digeſtion*, *viz.* that contain'd under the *Stomach*, *Inteſtines* and *Lacteals*; * for *analogous* to this viſible and intelligible *Gland*, are all the other ſmaller and imperceptible *ones*, with due regard to their *Situation* and Uſe; all form'd by different *Complications* and *Convolutions* of the *evaneſcent Arteries*, with proper ſecretory Tubes from containing *Baſons*, attended with Veins and *Nerves*, which being infinite in Number, and various in *Curvatures* and *Convolutions*, have yet one general *analogous* and ſimilar Nature, which nothing leſs than infinite Wiſdom and Sagacity could have contrived and executed, as muſt be evident to a thinking Perſon.

22. WHAT more may be neceſſary for the perfect *Concoction* and *Digeſtion* of the Food, to convert it into animal Subſtance by the

* *Vide* Bellini Opera.

great

great *Gland* of the *Stomach*, and the other leſſer Glands, together with the *muſcular* Action of the Coats of the *Arteries* and Veins, than gentle Heat and gentle Motion, I will not take upon me to ſay. Some are of Opinion, that the *lumbaginous* and *ſpermatic Animalcul* may have an original and created Tincture or *Zeſt*, from ſome ſpecific or ſubtile Fluid, infus'd at its firſt Creation, which may ſerve to maturate and perfect the *ſpecific* Secretions and Concoctions in theſe *Glands*, in all future times of its Duration here. And this Opinion may appear ſomewhat probable, by conſidering the Nature of *Runnet* made of a Calf's Stomach, and its Uſe in turning of Milk; by obſerving, that the younger the Calf is, the ſooner the Milk in its Stomach is turn'd into *Curds* and *Whey*; and that the ſweet *Whey*, or aqueous part of the Milk only, enters the *Lacteals*, the Curd moſtly turning into Excrement, and being carried out of the Body by the *Inteſtines*. For the Mouths of the *Lacteals* in an *Animal*, in a natural State, are at all times, and much more in its firſt *Stages* of living, ſo fine and ſtrait, that no Milk, no not even Aſſes Milk, can enter them in its *integral* and unbroken State; nothing but the very thinneſt, moſt aqueous and lighteſt Particles of Food, in a Vapour, can, without Violence and Pain, enter the Mouths of the *Lacteals* at any time of Life, which are inviſible to the fineſt Eyes, and ſcarce perceptible by the fineſt Glaſſes; ſo that

ſome great *Philoſophers* and *Phyſicians* have concluded them intirely of the Nature of a *Filtre* or very fine *Search*. A *Down*, Velvet, or *Tomentum*, being diſcover'd in all the ſecretory Ducts of the *Glands*, and an original *Zeſt*, being viſible by its Colour in the *Liver*, even in the *Fœtus*. The ſpecific Juice in the Stomach of all the Young that feed on Milk, turn it into a gentle Curd; the Bone in a *Dy* that a Child had ſwallow'd, having been conſum'd and waſted, when the *Wood* that made its black Spots and Points, was not touch'd. Theſe, and many more Obſervations, make it more than probable, that in *Digeſtion* there is ſomething beſide *Trituration*, and in the *Glands* an original ſpecifically attractive *Zeſt*. We know, that the Steams of *Mercury* will ſalivate and pervade all the Parts of an *animal* Subſtance, whoſe *parenchymatous* Matter, when drain'd of its Juices, becomes entirely *ſpongeous* and *cellular*; ſo that any *ſubtile* Fluid may pervade it, after ſufficient Hunger has drain'd it. But this original *Zeſt* in the *Glands*, gentle Heat, and gentle *Triture* from multiplied *muſcular Motion*, are ſufficient to explain all the Appearances of *Concoction* and *Nutrition*. And I ſhould, without Heſitation, define *Chyle*, in a natural and healthy State, an *Emulſion* made on Water of the *integral* Particles of *animal* or *vegetable* Subſtances by gentle Heat and Motion; which Particles by further Heat, and the reſpective Action

Action of the *Capillaries* and *Glands*, are first more minutely divided, and after associated by the several *Glands* respectively.

23. *SECRETION* is perform'd by a very simple, though very wonderful *Apparatus*, both in the greater perceptible *Gland of Concoction*, and the lesser imperceptible ones, *conglobate* and *conglomerate*, to derive particular Juices for appropriated Uses. For, 1. The *aqueous* Part of the *arterial* mixt Fluid is drawn off by the *Lymphatics*, each *Artery* having one or more *Lymphatics* constantly attending it for that Purpose. 2. The many *Convolutions* in different *Curvatures* and Inclinations of the *Artery* in the *Gland*, by retarding the *Circulation*, afford Time for the several specific Particles to approach and act upon one another, by their own innate *Laws of Gravity*, *Attraction* and *Repulsion*; for which further Purpose each *Gland* is furnish'd with a proper *Reservoir* or *Bason*, where the Particles are left entirely to act by their own innate Qualities; and with Veins, to carry off that Part of the mixt Blood that is now drain'd of its specific Particles. But, 3. The most wonderful Part of this *Apparatus* has been lately discover'd and made manifest by *Winslow*, where he tells, that after innumerable Trials and Observations, he constantly found the *secretory* Duct of every *Gland* cover'd all over in its Inside with a Velvet *Tow* or *Plush-coat*,

as

as a Filtre to it; and always, in Young and Old, tinged with a Liquor *analogous* and *homogeneous* to the Liquor ſecreted by the reſpective *Gland:* Which is a wonderful Confirmation of Sir *Iſaac Newton*'s Theory of Secretion, which aſcribes it to a ſpecific *Attraction* from the particular Nature and Matter in the ſecretory Gland. And, 4. From this Baſon or Enlargement of the Tubes, there goes a ſecretory Duct, to carry the now ſecreted and claſs'd Particles for the intended Uſes and Purpoſes of Nature. Juſt as in a Mixture of Grain or Shot of various Sizes and Magnitudes, ſeveral Searches may be contriv'd of different Degrees of Fineneſs, to ſeparate each of them diſtinctly; ſo in the *animal Glands*, the *Lymphatics* ſeparate firſt the thin Water or *Lymph* of the *Chyle* and Blood; the *Emunctories* and *parotid Glands*, the thicker and more glutinous Serum, to lubricate the *Stomach*, *Guts* and *Membranes*; the *Liver*, (a more operoſe and complicated *Gland*) the *Gall*, to promote the *periſtaltic* Motion, to ſtimulate and open the Mouths of the Lacteals, and to unite and *homogenize* the Particles of the *Chyle*; the Kidnies, the *Urine*; the *Teſticles*, the *Sperm*; the cutaneous Glands, the *Air:* and each *Gland* is more complicated, as the Subſtance it ſecretes is more viſcid; the finer Parts being firſt carried off, leave the groſſer more at reſt, and at Liberty to act upon one another by their ſpecific Laws of *Attraction* and *Gravity*; for we

muſt

muſt neceſſarily ſuppoſe the *Materia Prima* to have been *ſimular* in its Nature, and that Diviſion alone makes all the Difference of Particles, together with *Figure* and *Gravity*; and for the Exertion of this laſt Quality on the Particles, ſome Degree of Reſt and Approximation is abſolutely neceſſary, that they may come near, which the infinite *Complication* and *Convolution* of the *capillary Arteries*, and the Subtraction of the more fluid and thin Part of the Mixture, naturally procures in this Caſe.

24. We may have ſome groſs and general Notion of the Conduct of Nature in its Operation of *Secretion*, from what we obſerve of making of *Salt* of *Sea-water*. It is boil'd ſo long till a great part of the *aqueous* Particles is evaporated, the *ſaline* Particles, by reaſon of their greater Size and Gravity, not being able to riſe ſo faſt, and in ſo great Quantities; and by this *Evaporation* of the Water, the *ſaline* Particles are brought nearer and more crowded, and, being highly *attractive*, they unite in greater *Cluſters*; and when ſet to cool, being lighter than Water when thus united, they form a *Film* or *Cuticle* on its Top; and this *Film* or *Cuticle* skim'd off, and expos'd to a gentle Heat, to evaporate the remaining Water, hardens and *cryſtaliſes*, and aſſumes the form of *Salt*. So it is in Nature's Operation of the ſpecific *glandular Secretions* of Chyle, *Fat*, *Sperm*, *Choler*, *Wind* and *Flegm*. In ſuch *Glands* there is a *Baſon*, or *Receptaculum*

lum commune, where the ſpecific Particles being at reſt, after moſt of the *Lymph*, and the leſs ſaturated arterial Blood, are carried off by the Veins, they become more crowded, and are brought within one another's *Spheres* of *Attraction*, whence they coaleſce and unite into *Cluſters*, and in this Form are carried out for the Uſes of Nature, by a *ſecretory Duct* proper for that Purpoſe: Though even theſe *Secretions* are never abſolutely *homogeneous* and pure, but mixt with integral Particles. The healthier the Animal is, the more *homogeneous* and pure is the ſecreted Matter; but in a *morbid* State, they are *heterogeneous* and impure.

25. THE ſeveral Sets or Orders of *Glands* or *Searches*, in the healthy State of an Animal, ſeparate reſpectively and in a regular Progreſſion, all the ſuperfluous and redundant *Particles* of the *Chyle*, and leave only the pure, nouriſhing and *ſpringifying* (if I may ſo ſpeak) Particles in the *Serum*. The *emunctory Glands* deprive it of the groſs, earthy and watery Parts for their Purpoſe: The *Liver* ſeparates the groſſer and eſſential (or rather *Sea*) *Salt*, together with the thicker and leſs pure *Sulphur*, both which chiefly conſtitute the *Bile*: The *Lymphatics* take off the more watery Parts: The *adipoſe Glands* and *Bladders*, the purer *Oil* and *Sulphur*: The *ſpermatic* Glands, the more volatile and finer animal Salts, *Sulphurs* and *Earths*; and the *cuticular*

ticular Glands, the permanent or artificial *Air*, as it is ſet free or generated. The *inteſtinal* Tube, like a Common-ſhore, carries off all the Naſtineſs, Superfluity and Refuſe of the Aliment. Thus wiſe Nature has provided Means to keep the internal Parts of the *animal Machine* clean and ſweet, ſo long as may be its Duration in this State, if we do not clog or obſtruct her Operations.

26. The *Milk* of Animals fed on Vegetables is nothing but an *Emulſion* made on Water, impregnated with the *integral* Particles of *Vegetables*, diſſolved by animal Heat, and the *muſcular* Action of the *Stomachs* of the Animals, paſſing through the *Lacteals*, and going directly to the *mammilary Glands*, or at leaſt before it has often paſs'd through the Lungs; for then, by the *Nitre* of the Air, and grinding in the Lungs, it muſt neceſſarily change its Colour, as we ſee in the firſt Milk of *Animals* that have juſt parted with the *Fœtus*. And therefore Milk is very little different from weak *Soups*, *Broths* or *Emulſions*, ſtrongly bruis'd in a *Mortar*, and digeſted with a moderate Heat, and often ſtrain'd through a fine *Search*. Such an *Emulſion*, artificially prepar'd, will equally nouriſh tender young *Animals* as Milk itſelf; as we ſee by Children bred up by the Hand, and *Animals* taken from their *Dams:* and a ſmall Portion of an *oleaginous Alcali* will *homogeniſe* and

and unite ſuch an *Emulſion*, and keep its Parts from ſeparating, as it is in Milk; ſuch as *Sugar*, *Honey*, and the like: and thus may be made an *artificial Milk*, of the ſame Effect to nouriſh a tender *Animal* with natural *Milk* itſelf.

27. *ANIMAL* Subſtances and fermented Liquors, when taken for Food, by the Action of the *digeſtive* Powers in the *Primæ Viæ*, are turn'd into an *Emulſion* (in the Manner has been deſcrib'd) conſiſting of their *integral* Parts: By the *muſcular Action* of theſe *Organs*, and of the *abdominal Muſcles* in *Reſpiration*, but eſpecially by the reciprocal Action of the *periſtaltic* Motion, the finer and more ſubtile Parts only of this *Chyle*, or *Emulſion*, are propell'd through the *fine lacteal Searches*, and in repeated Circulations, being mix'd with the Blood, and paſſing through the *Lungs*, there acquire, by the *Nitre* of the Air and the Compreſſion of the pneumatic *Mill*, (by which the integral Parts are further bruis'd) that preciſe Magnitude of Parts which gives them a *ſcarlet* Colour, (for this is known to depend on a certain *Magnitude* of *ſuperficial Particles*) and are thus turned into pure *arterial Blood*, to be further elabour'd in the particular *Glands* for the future Uſes of Nature.

28. THE *Globules* of Blood are form'd in the larger Trunks of the Arteries and Veins, and even in the *Inteſtines* and *Receptaculum commune*

commune Chyli, by the innate *Attraction* of their Parts; a central Particle, either perhaps of *finer Air*, *Salt* or *Sulphur*, drawing towards it all thoſe within the *Sphere* of its *Attraction*, there neceſſarily and *mechanically* forms itſelf into a *Globule*; for this wiſe End and Purpoſe, that being porous, *globular* and *elaſtic*, it may accommodate itſelf, by turning into a flat or oblong *Spheroid*, according to the Neceſſity and Figure of the *Tube* through which it is to paſs, and ſo to keep the Sides of the finer *Tubes* from *coaleſcing* or being obſtructed. Thoſe *red Globules* make the *grumous* part of the Blood. And in the *Serum* itſelf alſo there are many of theſe to be found of a whiter Colour, which probably make the true *nutritive Globules*, to ſtop Crannies, and incraſſate the primary *Fibrils*. But when the *Serum* becomes groſs or lixivial, the greateſt part of theſe fine *ſcarlet Globules* are compreſs'd, and burſt or flatten'd, and thereby the *Grume* becomes duskiſh and black, and the original Beauty, Colour and Magnitude, and Shape of theſe *Globules* are chang'd. We have an obvious Model of this Operation of Nature, in the Globules of *Oil* and *Vinegar*, when mix'd with a quick Motion.

29. As to *muſcular Motion*, it is very ingeniouſly, and with great Probability, accounted for by Dr. *Bryan Robinſon*, from Sir *Iſaac Newton's* Principles of an infinitely

nitely rare and elaſtic Fluid; (*ſpiritus quidam*) which is the *Theory* of ſome other *Mathematicians*. Now nothing can be more elegant, *mechanical*, natural and *adequate* to all this Appearance, than this Account of *muſcular* Motion, if this elaſtic Fluid could be proved. But ſurely the *Elaſticity* of the Fibres, eſpecially of their *membranous* Coats of the infiniteſimal *nervous Fibrils*, which they have from the *Meninges*, which every one allows to be extremely *elaſtic*, muſt have the far greater Share in all the animal Functions, and in *muſcular Motion*. But of this more hereafter.

30. WHAT are the true *primitive* material *Organs* employ'd in Thinking and *Cogitation*, what their Nature and Figure, is abſolutely unknown, and, I fear, unknowable by us. That this *immaterial Principle*, in its preſent State of Union, neceſſarily requires ſome *organis'd* Inſtruments in its *intellectual* Operations, as well as the Senſes do, I think, is paſt all doubt. *Debauches*, *Diſeaſes* and *Accidents*, hurt and ſpoil many of our *intellectual* and *ſpiritual* Functions, and *Medicine* and *Art* will reſtore and recover them; and to be perfectly perform'd, they require an entire Sanity in the great primary *Organs*. That the *Nerves* (which are certainly ſlender, cellular and, perhaps, unelaſtic *Filaments*, at leaſt in their Pith) are abſolutely neceſſary to *muſcular Motion*, is moſt certain; and whether they

they require to be inflated by a *Materia Subtilis*, or *Liquidum Nervoſum*; yet none doubts, that the firſt *Impulſe* proceeds from the *immaterial Subſtance*; and the ſame Impulſe and Energy may be communicated directly to fitly *fram'd* and duly *organiz'd* Filaments, at leaſt to their *membranous* Coats, without the Intermediation of any ſubtile Fluid: and whether that *Fluid* be *real* and neceſſary or not, can never be aſcertain'd; in this Point all can be but probable Conjecture only here. Some ſubtile Fluid may be requir'd towards *Hearing* and *Seeing*, becauſe nothing but the *Firſt Cauſe* can act at a Diſtance without a *Medium*; but the *ſentient Principle* has the *Nerves* between it and Objects, to act and be acted reciprocally on: For that all Bodies whoſe Particles are continuous, muſt be *repellent* and reactive, is neceſſary from the Nature of Matter; and though this *ſubtile Fluid* may be, perhaps, convenient to account for the Appearances of inanimated Matter, yet it ſeems here *multiplying* Cauſes and Qualities without Neceſſity.

31. We find that the *Brain* of all *Animals* is guarded more ſtrongly, and with greater Care and Induſtry, than any other *Organ* of the Body. No living *Animal* has ever been found without a *Brain*, or ſomething analogous to it: they have all pretty much the ſame general Structure and Texture. *Wounds* and *Bruiſes* in it, if they are deep, conſtantly put an *End* to living, at leaſt to *rational Life*

and *Thinking*. *Concuſſions*, Strokes, *Fiſſures* and *Contuſions*, generally diſorder *Life*, and always ſome kinds of *Thinking*; ſmall Strokes on ſome particular Parts, affect Thinking and Living more than greater on others. We cannot but imagin, that it is ſomewhere in, with and by our *Brain*, that we think and conſider: *Choler*, *Wind*, and *Crudity*, render *Thinking* painful and irregular. To have an uniform clear Head, the *Primæ Viæ* muſt be clean, and all the *Functions* regular and eaſy. Want of due natural Reſt, *i.e.* neceſſary Repair, will, at laſt, greatly diſorder Thinking in the moſt Healthy; and the *Paſſions*, rais'd to any Height, (eſpecially the dark and painful ones) wonderfully diſcompoſe eaſy and pleaſant *Thinking*. From all which it is highly probable, that the *Organs* and material Inſtruments of *Thinking* are the *nervous Glands*, and *Fibres*, and the *infinite Convolutions* and *Combinations* of theſe *Nerves* in the *Brain*; and that the *Conduits* of *muſcular Motion* are the ſame *Nerves*, ſpread over and branch'd out in every the minuteſt Part of the Body. I ſay, the *Organs* of *Cogitation* are, at leaſt, in their Origin, in the *Brain* and its *Appendages*, whoſe Texture, Nature, Uſes and Manner of Operation, are hitherto very imperfectly deſcribed or underſtood, and, I fear, are above finite *Comprehenſion*; Generals being all we ſhall ever know in the Works of the *God of Nature*.

32. I IMAGIN, the *ſpiritual* Subſtance uſes material Organs, of one kind of Matter or another, in its *Operations*; and it is highly probable, they are the *nervous Glands*, the *Filaments*, the *Nerves*, but eſpecially the membranous Coats of the infiniteſimal *Nervuli*, and their wonderful Texture and Mechaniſm, ſo little known or underſtood. We find *Ideots* have its *Texture* and common *Figure* unnatural: Thus their *Forehead* is ſometimes too narrow, the *Hindhead* too long, or the *Crown* too high, by ſome unnatural Compreſſion or Accident in the Womb, whereby the intellectual Functions of the *Brain* are diſorder'd and render'd incapable of Action. An *Hydrocephalus*, an *Impoſtume*, an *Excreſcence*, a harden'd or ſchirrous *Gland*, an *Inſect* in the Brain, has been known to give intenſe Pain and *Headach*, and to have deaden'd or quite extinguiſh'd the *ſpiritual Functions*: Whether the *Nerves* and *Glands* of the *Brain* be only *Elongations* of the *Arteries*, or a diſtinct Subſtance of themſelves, (the Brain having arterial *Glands* and Branches only to keep them in due Heat, Humidity, Tenſion and Nuttiture) is not material; but on their *Integrity*, *Soundneſs* and *Pliancy*, (which muſt be preſerv'd and maintain'd by that of the whole Body) does regular, eaſy and deep Thinking depend. *Aſtruc* has, I think, offer'd ſtrong and probable Conjectures about the *Mechaniſm* of the *Brain*, and the Manner of its communicating and receiving Impreſſions, and beginning *Vibrations*, from

the, and to the *ſelf-moving* and *ſentient* Principle the Soul, from the Principles of *Muſic* and *Harmony*. Becauſe the *Brain* is pulpy, and the *Nerves* lax, ſome have thought *both* unfit for receiving or communicating *Vibrations* or *Undulations*, not conſidering that the great Activity of both lies in their *Membranes*, that involve every the leaſt *Fibril* or *infiniteſimal Nerve*: they are all included and tied, as it were, in a *membranous* Bag, and faſten'd together by Threads of the ſame: And every one knows, *Membranes* are the moſt elaſtic, and fitteſt to tranſmit *Vibrations* of all Bodies whatſoever; their internal Subſtance is probably *cellular*, like the Pith of a Ruſh, deſign'd only to ſeparate a milky Subſtance, (which the Ignorant call the *Liquidum Nervoſum*) intended to preſerve their *Elaſticity*, *Glibneſs*, and the *vibrating* Powers of theſe *Membranes*, in which their *mechanical* Virtue alone conſiſts. The Pleaſure, Facility and Elegance of Cogitation, conſiſts in the Suppleneſs, Culture and habitual Exerciſe of thoſe *nervous Organs*; juſt as much, as a graceful and eaſy Carriage and Manner of the Body is acquir'd by proper Exerciſe, and repeated Acts. We muſt uſe this ſort of intellectual Exerciſe, and apply theſe *nervous Glands* in Thinking, in the ſame manner as we uſe the ſeveral Muſcles, or widen, and direct the Pupil to a proper Diſtance in *ſeeing*: For Attention and Conſideration, we muſt fix theſe material Organs of the *intellectual* Faculty, as we fix our Eyes to ſee or diſcern diſtinctly, and by repeated

Acts

Acts acquire Facility and Perfection equally in both: They may be ſpoil'd, inflam'd, jaundic'd, made *epileptic* or *paralytic*, *callous* or *clumſy*, in the ſame Manner, and almoſt by the ſame Means, we bring our Eyes or other Senſes to that State. We muſt think frequently and intenſely, to be able to think juſtly and deeply.

33. THE Bodies of the *brute* Creation, with regard to Circumſtances, are of the ſame *analogous* Nature with thoſe of the *human* Race. The *animal Functions* of *Digeſtion*, *Circulation*, *Perſpiration*, *Reſpiration* and *Secretion*, are perform'd in them, in the ſame *analogous* Manner as in us, with proper Regard to Circumſtances; and they are actuated and animated by a *ſpiritual Subſtance* of ſome one *Rank* or *Order*, for ſome infinitely wiſe Purpoſe; for *organiz'd* Matter alone cannot account for their *Functions*. We ſee, by obſerving the *lighteſt* and the *leaſt*, that is, by living according to the general *Laws* and *Order* of Nature, excepting *Accidents* and *epidemical Diſtempers*, they live and die with few or no *Diſtempers*, and paſs this Period of their Duration with tolerable Eaſe and Tranquillity; except the few that our *Example*, Management, or ſocial Influence *debauch*: and it is obſervable, that only thoſe who are carnivorous, or are in Danger of *over-cramming*, by the Flavour of their *Food*, have *Organs* for vomiting, or, at leaſt, do vomit, and none but

thoſe under our *Direction* and Government, or taught, or are fed and cultivated by *us*, have the Diſeaſes *analogous* to, or the ſame with ours, which are conſtantly produc'd by over-much or improper feeding them, as is well known in *natural Hiſtory*; and all their Diſtempers are conſtantly cur'd, if *carnivorous*, by being confin'd to a total *vegetable* or *Milk* Diet; if granivorous, by leſſening or diluting their Food, as I have ſeen by Experience.

34. *SLEEP* I conceive to be caus'd by the *Diſability* and Incapacity of the bodily *Organs* to continue and perpetuate the active *rational* and *voluntary Functions*. Without Repair, Nutrition and winding up, they grow *languid* and *unelaſtic*. When by Labour, or the *common Expence of living*, the *Organs* are relax'd and debilitated, there muſt be an alternate *Ceſſation* to repair and refit them, which is call'd *Sleep*; and accordingly we find the *animal* Body ſhorten'd and compreſs'd by its own *Weight*, by Action, and by the Loſs of its *Spring* againſt Night, and lengthen'd and extended again in a Morning. What hinders *Sleep*, is the continual *Action* of an internal Fluid, *Wind* or *Flatulence*, acting on the *internal Membranes*, (of which the Bowels principally conſiſt) pricking and ſtimulating them, and forcing them into *Action*; and by the *Recoil* or *elaſtic* Sharpneſs of this internal *Aura* or *Flatus*, producing wild *Cogitation*, or irregular *intellectual Operations*. Hence it is,

that

that the Body is reſtleſs; and often there is an Endeavour to *gulp*, *expel* and *throw* up this *Wind*; that Medicines that force the *Perſpiration*, as *Opiates*, *Eaſtern Gums*, *animal Salts* and *Spirits*, *Aromatics*, *Cordials* and *Diaphoretics*, procure *Sleep*; and a *Doſe* of the *Pilul. Gummoſ.* with an *Aloetic*, will give a good Night, as it drives out the *perſpirable* Matter every way; and *Cyder*, and any flatulent Food, (as green Peaſe) will hinder it. *Dreaming* is but *partial Sleeping*, for *Sleep* admits of all the *Degrees* of Quantity; there are between ſound *undreaming Sleep* and perfect healthy *Wakeing*, all the Degrees and Terms that are between a given Quantity and Nothing; and accordingly, *Labour*, *Fatigue*, *light* Food, gentle *Evacuations* of all kinds, will procure, in ſome Degree, *undreaming Sleep*; and the more rank, high and poignant the *Aliment*, the more painful and terrifying will be our *Dreams*; as on the other hand, the more mild, ſoft and light our *Food* is, the more pleaſant and gentle will be our *Dreams*, if otherwiſe healthy. And *old* Perſons, *weak* and *ſickly Conſtitutions*, and People under *acute* or *chronical Diſtempers*, eſpecially thoſe that are call'd *Nervous* and *Cephalic*, have the wildeſt, moſt inconſiſtent and painful *Dreams*, and the moſt imperfect *Sleep*, and ſometimes no *Sleep* at all, which is one of their greateſt Miſeries. And I ſhould *philoſophically* define *Sleep*, a *Diſability* or *Incapacity* of the material *Organs*, from Exinani-

tion, Uſe and Expence, to continue eaſily much longer the *intellectual Functions* and *voluntary Motions*, without a new Repair and winding up, in the ſame Manner as *Hunger* is caus'd; and *Dreaming* to be only partial and imperfect Wakeing, by a perpetual *Irritation* from *Flatulence* and obſtructed *Perſpiration*, on the internal *Nerves* and *Membranes*, or from Pain; and *Wakeing* to be the perfect and pleaſant *Pliancy* of the *intellectual* and *animal Organs*, to obey the *Impulſe* of the *ſelf-motive*, *ſelf-active Spirit*; and that in this *immaterial Agent* there is a lower, and more ordinary and weaker *Effect* and *Energy*, (or a contractile and expanſive *Energy*) by which the *animal Functions* are perpetuated without Interruption; and a *higher* and more intenſe and voluntary Degree of *Agency*, by which *Wakeing* and the intellectual Operations are perform'd; and it is *this* that in *ſound Sleep*, and in a *Deliquium*, is ſuſpended, and in *Death* both, without a new Vehicle.

35. As to *Longings*, *Likeings*, *unnatural Appetites*, Specialities, *Sympathies* and *Antipathies* in Foods, Perſons or Things, in *breeding Women*, in *Children*, *weakly Conſtitutions*, or *old Perſons*, and their uncommon ſeeming *ſupernatural* and *equivocal* Appearances and Effects, I take them to proceed from *Accidents*, *morbid Humours*, particular Diſeaſes, an ill or weak State of the *Fluids* and *Solids*, a particular Diſtemperature of ſome *glan-*

glandular Secretions, particular Uſages in common Life, an improper Culture and Education in Youth, or a *Mal-formation* of the *material Organs* of the *intellectual* Faculties; and ſo to be no Exception againſt *general Laws* and Rules, or that of the *lighteſt* and the *leaſt* in particular; no more than a *double Apple* or *Nut* from the ſame Stalk, or any *monſtrous* vegetable or *animal* Production or Birth, is a ſolid Objection againſt the general Laws of *Vegetation* and *Generation*; or no more than the *Dreams* of a ſick or *nervoſe* Perſon, are againſt the Rules of common Senſe; the natural and neceſſary Imperfection and *Unpreciſeneſs* of groſs Matter, of the *Element* we live in, and the Fluids and Solids that ſurround us, makeing this Interruption and Deviation from *Preciſion* and the *general Laws* of *Nature*, neceſſary and unavoidable; perhaps they may be ſome of the *Means* and *Inſtruments* of *God's moral Government* of his World, wiſely appointed by Him, and under his *immediate* Direction, to hurt the natural *Liberty* of the Soul the leaſt poſſible. And I know not, if the Opinion of ſome may not be very ſolid and juſt, that in this *laps'd* and *probatory* State of our *Syſtem*, the infinitely wiſe *Author* of Nature may have on purpoſe left a *Darkneſs*, *Imperfection* and *Deteriority* on the Face of his Works, to keep his *rational Creatures* in this their *expiatory* State, *humble*, *dependent*, and confideing on Him only, and ſo to prevent a ſecond

Lapſe;

Lapſe; as wiſe Princes make *Gaols* and *Correction-houſes* neither delightful nor commodious, on purpoſe to reclaim *Felons*. *God* gave the *Jews* Laws (*i. e.* the *ceremonial* Law) that were not good and perfect. And *Cornaro*'s (for Example) particular Appetite for new Wines, and Averſion or Suffering from old Wine, (which is certainly preferable, and more ſalutary, by its having loſt ſome of its fiery, inflameing and *deleterious* Particles, and from the more perfect Mixture and Maturity of its Compoſition) was of this Nature; and no Argument can be drawn from it againſt the general Rule of the *lighteſt* and the *leaſt*.

36. *MEDICINES* act principally by their moſt *eminent* and *ſenſible Qualities*; being *mix'd* Bodies, that Property that is moſt eminent in them, and thoſe of the component Particles of ſuch a Nature that are moſt numerous, have the principal Effect, and are moſt to be regarded in *Medicine*. I have already obſerv'd, that it is the *integral Particles* that are chiefly proper and uſeful both in the Nouriſhment of *animal* Bodies, and in the other *animal Functions*; they are indeed broken and divided, and *claſs* themſelves in ſome degree afterwards in the capillary *Arteries*, in the *Viſcera*, and in the *Glands*, for the ſeveral Uſes of Nature: But ſtill, even in theſe *Secretions*, they retain their chief and *eminent* Qualities, as we often find by the

Taſte,

Taſte, *Colour* and *Smell* of the *Secretions*. For we are ſo conſtituted, that the minuteſt and leaſt Particles of the Compoſition of Bodies would be abſolutely unfit to carry on the *animal Functions*; and were our Food to be divided into ſuch *Particles*, they would, from their Smallneſs and conſequent greater degree of *Attraction*, run into *Combinations* and *Cluſters*, and form *Obſtructions*; or at leaſt would not *aſſimilate* with the Fluids that circulate in *animal* Bodies: And therefore *Nutrition* is better perform'd by the *integral* Particles of *Animals* and *Vegetables*, that are *ſoft*, *porous*, and *abound* moſt with *Water*, *Air* and *Earth*. And *Phyſic* and the *Materia Medica* being but an unnatural and temporary kind of Food, ought to be choſen of the ſame *analogous* Form and Nature; for *Medicines* will always *act* by their *integral* Particles, and their moſt *eminent* Qualities only, the reſt being moſtly loſt, or of little *Efficacy* in their Operations. For *Minuteneſs* and *Preciſion* in our *material* or *ſpiritual* Operations, has little Uſe in our preſent Circumſtances, *mediocriter & quam proximè*; and a *Niſus* being all that is attainable by a finite Creature: The *Maximum* and *Minimum* are never to be aſcertain'd in *bodily* or *ſpiritual* Operations in our preſent State, but only in abſtracted Speculations; for this will be ſufficient for *Health* and *Serenity*, and all Intentions in our preſent Condition. All *chymical* Medicines, all *Spi-*

rits,

rits, Salts, Oils, every thing that has paſs'd through the *Tortures* of the *Fire,* is ſo ignited, and the *Matter* and active *Particles* of *Light* or *Fire* are ſo *tranſubſtantiated* into it, that it is ever afterwards unfit to be admitted into an *animal* Body, except as a *Cauſtic* is, to bring on preſent Pain; and its Fire is more hurtful, when taken as an *Alterative,* than its *Subſtance* can do Good, be that what it will. We ſee wiſe Nature furniſhes no Matter of *Food* or *Phyſic,* that has paſs'd any higher Degree of Heat, than *Incubation, Vegetation, Infuſion, Maceration, Digeſtion,* and the like.

37. SINCE then all *medical* Effects on *animal* Bodies are perform'd chiefly by *integral* Particles, and their moſt *eminent* Qualities, it will follow, that *Mercury* (for Example) will ever act chiefly by the greater *Gravity, Rotundity,* and *attractive* Virtue of its *Particles*; *Salts,* by their pointed *Stimulus,* ſtrong *attractive* Power and Solidity; *Water,* by its *Moiſture, Dilution,* its want of *Elaſticity,* and its *Thinneſs,* which makes it fit to convey ſolid *integral* Particles of equal *Gravity* with itſelf, through *animal Tubes; Sulphurs,* by their *fiery* Particles and Heat, and, if *oily,* by cementing and uniting *earthy* Particles; *Earth,* by giving a *Solidity* and *Firmneſs,* by imbibeing *Moiſture,* and filling *Chaſms* and *Vacuities*; *Bark,* by its vegetable *Stypticity*; and *Steel,* by its greater *mineral Aſtringency*; *Oils,*

Oils, by their *Lubricity* and *Relaxation*; *Spirits*, by their *Inflammation* and over-heating, carrying in them the material Substance of actual *Fire*. And the same Effect that Medicines have on the *Mouth* and *Palate*, they will also have in a greater Degree on the whole *alimentary Tube*, whose Nature is much the same from its *Orifice* through its whole *Continuity*, only in some Places more *sensible* and *delicate*. And one of the best and most effectual *Trials* of the *Virtues* and *Effects* of Medicines, in some general Degree, is *deliberately* and often to examine them in small Trials by *Taste*, *Smell*, and their Effects on the *Senses*; which kind of Experiment would seem the most useful and necessary for the *gross* of Mankind, in things relating both to *Food* and *Physic*.

38. *EXPERIMENT* and *Observation* are of great Use in the *Practice of Physic*, and absolutely necessary to the Cure of the actual, *now* common Distempers, not to be prevented, but *remedy'd*. But surely there must be a more general and more compendious Method intended by the *Author* of *Nature* for the generality of Mankind; else the *Means* of Health could only be perfected with the *End of the World*; and each *Country* and *Climat* which has little Communication with the rest of the World, must work it out by their own Means: and yet *Health* and *Serenity* seem so ne-

neceſſary to every End and Purpoſe that an *infinitely wiſe Being* could have, in ſending us here, that we may conclude they have ſome more *ſimple* and obvious Guard. Scarce one *Individual* is made entirely the ſame with another; there is in every one a *Principle* of *Individuation*; the *Country*, the *Climat*, the *Age*, the *Food*, the *Uſages* of Life, vary the Conſtitutions and *Diſeaſes* of Men *in infinitum*; the ſeveral Stages, Degrees and different *Symptoms* of Diſeaſes diſtinguiſh them. Few Perſons are qualify'd for making *uſeful Obſervations* in *Phyſic*; to this end a Man muſt be well acquainted with *natural Philoſophy*, the *Materia Medica*, and the *animal Oeconomy*, have a *Genius* and *penetrating Sagacity*, to be able to diſtinguiſh *Occaſions*, *Coincidents* and *Circumſtances* from *Cauſes*, and *Accidents* from *Effects:* All theſe, and a great many more *Qualifications*, are requir'd in thoſe who would make *uſeful* and *deciſive* Obſervations; and how few ſuch there are, I leave the World to judge: Few but ſuch as a *Bacon*, *Boyle* and *Newton*. And yet we muſt not think the beneficent *Author* of *Nature* has left Men to *Chance*, *Caſualty* or *blind Fate*, in the Conduct of their *Life* and *Health*. There are in *Phyſic*, as in the *natural* and *moral World*, *general Laws*, *univerſal Propoſitions*, and a perpetual *Analogy*, that runs through the whole of the *Science* for that End. Keep the Blood *cool*, *fluid* and *balmy*, uſe due *Exerciſe*, proper

proper *Air*, and a *Regimen* of the *lighteſt* and the *leaſt*, and keep all the *Non-naturals* regular and guarded to preſerve *Life*, *Health* and *Serenity*; uſe proper *Evacuations* of all the fit kinds in Diſtempers, and *ſpecific* Alteratives, to diſpoſe the morbid Matter for Elimination, under a *Regimen* of *Diet* directed by the Nature of the Diſtemper; and nicely obſerve how wiſe Nature cures a particular Diſtemper, when a Cure happens; and endeavour as near as poſſible to imitate her Means and Medicines, if ſhe happen to uſe any. Theſe, or ſuch-like *general Laws*, indicated by *natural Philoſophy*, and the Knowledge of the *animal Oeconomy* and *Materia Medica*, under well-guarded and exactly made *Obſervations* for one's own Uſe, will beſt ſerve the End of Health, eſpecially when every one, after a certain Age, becomes his own *Phyſician*. I ſpeak not here of particular Diſtempers: they are afterwards conſidered.

39. Dr. *Bryan Robinſon*, in the laſt Section of his *Animal Oeconomy*, has contriv'd a Method to determin, by *Experiment*, the Force of the ſeveral Liquors uſed either for *Food* or *Phyſic* on the *animal* Solids, which might give *Light* to the Practice of *Phyſic*; his Concluſions being juſt and luciferous, as far as the imperfect Nature of *groſs Matter* and *Mechaniſm*, and the *unpreciſe* State of the *animal Oeconomy* thereon depending, admit; to which one might add, for Caution, theſe following

lowing Considerations; 1. The Foods, *i. e.* Meats and Drinks, that brace and increase the *Spring* of the *Fibres*, may possibly *equally* thicken and incrassat the *circulating Fluids*; so that the Benefit deriv'd on the Solids may be sometimes lost on the denser Fluids, the *Resistance* in the Fluids being increas'd in *Proportion*, as the Force and Spring of the Fibres is strengthen'd; as we see in the Effects of *Wine*, strong fermented *Liquors* and *Spirits*; which, though they at first undeniably strengthen and increase the *Spring* of the *Solids*, yet by incrassating the *Fluids*, and increasing their Resistance, and likewise by alternately *bracing* and *relaxing* the *Fibres* themselves, must at last weaken and destroy their *Tone*, and so render them unfit to carry on the *animal Functions* *. 2. May there not be an *original innate* Degree of *Spring* and *Elasticity* communicated to the *linear Solids* at their first *Creation*; which, when they are *develop'd* and drawn out to their utmost *Extension*, and settled therein, can scarce ever be much augmented or increas'd, by all that Nutrition or Art can do, though they may be readily clogg'd and so weaken'd?--- If *Elasticity* consists in the Degree of *Attraction* of the primary or of the *minutest* Particles, which may be very great when they are at an *infinitely* small Distance from one another; and so make

* *Vide Dr.* Hales's Vegetable Staticks, Vol. II.

them

them unite again with *Force* and *Velocity*; but is none at all at a *finite* Distance, or when they are the least without the *Sphere* of one another's *Attraction*; then the *native, simple* and true *Elasticity* of Fibres will consist principally in a *String, Chain* or *Line* of such *Particles* only; and the more these *Particles* are clogg'd, patch'd or interrupted by *foreign Matter*, the more *clumsy* and *unspringy* will this Line become; and the cleaner and more simple they are, the greater will be its Elasticity: so that the great End and Purpose of *Physic*, is only to remove *Impediments* and *Incumbrances* from original *Elasticity* and Health. The *Patch* and *gross Case* superinduc'd upon the *linear Solids* afterwards, seems only intended to defend their *Delicacy*, and enable them to bear the *crass Element* they are intended for: And accordingly, young tender *Twigs* are most elastic; young *Animals*, after a certain Age, are most *agile*; after too long Sleep Men are more *lazy*, after a *Debauch* quite heavy; and the *smallest Fibres* have the quickest and most delicate *Spring*; and the *elastic* Force of Springs is in Proportion to the *Power* by which they are *compress'd*. *Musical Springs*, the finer they are, the quicker and sharper are their *Vibrations* and Notes, and the *Base* is the grossest and most obtuse of all. It would seem therefore, that the *quickest* and most *active Spring* is in the *linear* Union or smallest *Fibrils* made of these Particles; and that when

many ſuch *Lines* and *Fibres* are united, the *Energy* or *Elaſticity* of the Spring is leſſen'd, (though their Strength is increas'd) from the unpreciſe and groſs Nature of Matter and Mechaniſm, and a Multitude of different *Attractions*; for the *Particles*, of which Bodies are compos'd, cannot be ſo put together or united, as perfectly to agree in an *Uniſon* or any *harmonious Proportion.*

40. I CONJECTURE the Matter to ſtand thus: The *Author of Nature* originally intended that the Mechaniſm and Condition, and particularly the *original Spring* and *Elaſticity* of the *Fibres* of all human Bodies, ſhould be much the ſame as they were in the firſt *original Pair* from whence they were deriv'd. Before the *Lapſe* was compleated, and had its full Effect, the *final End* of ſuch a radical Derivation, was that the *Poſterity* might have all the Benefit and Advantage of the *Experience, Culture* and *partial Reſtoration* of the *Parents*: But in all *free* Beings, the *Regreſs* muſt of Neceſſity be as *damnifying* as the *Progreſs* would have been *beneficial.* When the *Poſterity* of the firſt *Pair* came to multiply, *ſome* of the very firſt, by the *Abuſe* of their *Liberty*, deprav'd and vitiated both their *ſpiritual* Nature, and their *bodily* Machins, to a much greater Degree than *others*; *ſome* the *firſt* moſt, others the *latter*; and *infinite Wiſdom* acting ever by *general Laws*, both in the

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material, moral and *ſpiritual Worlds*, and intending to recover and reſtore his *lapſed* Creatures to *Order*, by all the *Energy* of his infinite *Wiſdom* and *Power*, conſiſtent with their *original Powers* and theſe *general Laws*, the Differences of theſe *Tribes*, *Orders*, *Nations* and *Peoples* (from their *ſpecial* Corruptions, and from *Sun*, *Soil* and *Culture*) that now exiſt, became what we now ſee them, and no doubt are, with *infinite* Wiſdom, fitted for this general End of *univerſal Reſtoration*, and the Recovery of each *Individual*, who continuing averſe to *Order*, may retard their *Reſtoration* beyond any *given* Time.

41. THE *Conduct* of *Nature* is ſurprizingly beautiful, in preparing that *viſcous Water*, which is the *Inſtrument*, *Mother* and *Matter* of *Vegetation* and Growth in *Plants* and *Vegetables*, to fit them to be Food for *Animals*. The proper Seat and Treaſure-houſe of this Element is the *Ocean*, ſpread over at leaſt one half, if not more, of this our *Terraqueous Globe*; which *Water* waſhing away, and continually diſſolving the ſmalleſt and fineſt Particles of the *Mountains* and *Rocks* of *Salt* in its Boſom, becomes impregnated and ſaturated therewith, and ſo turns to a *Brine*. And this Salt thus diſſolv'd, by its *pointed Figure*, and by the conſtant *Flux* and *Reflux* of this heavy *Volum* of *Water* produc'd by the *Attraction* of the Moon, is not only kept from *coaleſcing* and

cryſtalliſing, and ſo from falling again to the *Bottom*, but likewiſe preſerves the *Sea* from *Stagnation* and *Putrefaction*. This large *Surface* of *Water*, conſtantly expos'd to the *Heat* and *Action* of the *Sun*, by its *rarefying* and *attractive* Virtue, (as it were by a gentle natural *Alembic*) is drawn up conſtantly in a *fine Vapour* into the *Atmoſphere*; and having a weaker more diluted *Oil* in its Texture, from the *ſulphurous* Beds, and *dead Fiſhes* in it, retains by this *ſulphurous* Mixture, ſome Particles of the *Sun*'s *Heat* and *Fire* in its Compoſition, which preſerves it from *freezing* and *vitrifying* into *Ice*. This *briny Water*, I ſay, thus impregnated with *Salt* and *Oil*, and ſome of the *Solar* Rays and *Particles* of *Fire*, is toſs'd up and down the *Atmoſphere* by *Winds*, and is thereby alſo impregnated near the Surface of the Earth with more *Heat* and *Fire*, and the permanent Particles of *Air*, and with the *Steams* and *Exhalations* of *Sulphurs*, *Metals* and *Minerals*, that by the greater *Heat* of the *Sun* (being heavy and groſs) cannot be ſo readily drawn up into the *ſuperior Regions*; and thus impregnated with *four* of the *Elements*, and become, as it were, a *Menſtruum* by theſe *Mixtures*, it is precipitated by the *Cold* of the Night Seaſons towards the Surface of the *Earth*, where attracting thoſe finer terreſtrial Particles it meets with in its Way, it paſſes on to the gapeing Mouths of the Roots of *Plants* and *Vegetables*; and thus

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gradually impregnated with more and more of the finer Particles of all the *five Elements*, in a greater or leſs Proportion to its intended *final* Uſes, by the innate *attractive* Principle in the *Tubes* of the *Roots*, and the Action of the *Sun* in the ſeveral *Climats*, *Seaſons* and *Soils*, and the alternate Succuſſions from different Seaſons, and the various Changes of the *Atmoſphere*, it is both fitted for the *Aliment*, and alſo forc'd up the *Tubes* of the *Plants* and *Vegetables*; and thus it develops, extends and incraſſates the *linear Fibres* of Seeds, (that is, the *miniature Plants*) till they thus become naturally prepar'd, *vivifying* and *fertiliſing* Food for *Man* and *Beaſt*. Theſe gapeing Orifices of the Roots of *miniature Plants*, will *attract*, receive and be nouriſh'd by any Matter for a time, that is neareſt them; but this is the general Conduct of *Nature*, for the common and beſt Nouriſhment and Accretion of *Plants* and *Vegetables*, to become the beſt and fitteſt Food or Medicine for Man and Beaſt.

42. If the *Elaſticity* of *animal Fibres* conſiſts in the Degree of *Attraction*, and the *Plainneſs* of the *Surfaces* of their *conſtituent Particles*, as ſeems highly probable; which *Particles* being ſeparated by Force to a Diſtance within the *Sphere* of their *Attraction* only, are, by their *attractive* Virtue, united together again with a *Momentum* compounded of

their Degree of *Attraction*, and the Quantity of their *touching plain Surfaces*; then may all the Solid of an *animal* Body be conſider'd collectively as a *Bundle* of *Twiſts*, originally fram'd, weaven and ſhap'd into the Forms and Figures, which *Anatomiſts* find in a Human or other Animal Body; far above the Power of the preſent known Laws of *Motion* and *Mechaniſm* to execute, or the Limits of finite Underſtandings to plan or conceive.

43. In the Memoirs of the *Royal Academy* for the Year 1730, Mr. *Geoffroy* has given a Method for determining the *Proportion of Nouriſhment*, or true Matter of the Fleſh and Blood, contain'd in any ſort of Food. He took a *Pound* of Meat, that had been freed from the *Fat*, *Bones* and *Cartilages*, and boil'd it for a determin'd Time in a cloſe Veſſel with three Pints of Water; then pouring off the Liquor, he added the ſame Quantity of Water, boiling it again for the ſame Time; and this Operation he repeated ſix ſeveral times, ſo that the laſt Liquor appear'd both in Smell, Trial and Taſte, to be little different from common Water. Then putting all the Liquor together, and filtrating, to ſeparate the too groſs Particles, he evaporated it over a ſlow Fire, till it was brought to an *Extract* of a pretty moderat Conſiſtence.

THIS Experiment was made upon ſeveral ſorts of Food, the Reſult of which may be ſeen in the following Table.

		Ou.	*Dr.*	*Gr.*
A Pound of Beef	yielded of Extract	0	7	8
Veal . . .		1	1	48
Mutton . .		1	3	16
Lamb . . .		1	1	39
* Chicken .		1	4	34
* Pigeon . .		1	0	12
* Pheaſant . .		1	2	8
* Partridge .		1	4	34
* Calves Feet		1	2	26
Carp . . .		1	0	8
Whey . . .		1	1	3
Bread . . .		4	1	0

N. B. THOSE mark'd with Aſterisks were not freed from the Fat and Bones.

ACCORDING to this Table, the Proportion of Nouriſhment contain'd in theſe Foods will be as follows:

Beef . . .	7
Veal . . .	9
Mutton . .	11
Lamb . . .	9
Chicken . .	12
Pigeon . .	8

Pheaſant . .	10
Partridge . .	12
Calves Feet .	10
Carp . . .	8
Whey . .	9
Bread . .	33

FROM the foregoing decideing *Experiments*, it is evident, that *white*, *young*, *tender animal* Food, *Bread*, *Milk* and *Vegetables*, are the beſt and moſt effectual Subſtances for *Nutrition*, *Accretion* and *ſweetening* bad Juices. They may not give ſo ſtrong and dureable *mechanical Force*, becauſe being eaſily and readily digeſtible, and quickly paſſing all the *animal* Functions, ſo as to turn into good Blood and muſcular Fleſh, they are more *tranſitory*, *fugitive* and of *prompt Secretion:* yet they will perform all the animal Functions more readily and pleaſantly, with fewer *Reſiſtances* and *leſs Labour*; and leave the Party to exerciſe the *rational* and *intellectual* Operations with Pleaſure and Facility; they will leave Nature to its own *original Powers*, *prevent* and *cure* Diſeaſes, and *lengthen* out Life.

THE

THE

General Method *of* Cure

In the

DISEASES *of the* BODY,

And the

DISTEMPERS of the MIND

Depending thereon.

PART II.

The MEANS and METHODS for preserving *Life* and *Serenity*.

CHAP. I.

General REFLECTIONS *on the* Nature, Efficacy *and* Neceſſity *of* Temperance *or* Abſtinence *in the* Cure *of* Chronical Diſtempers.

1. HOW it may be in other *Countries* and *Religions*, I will not ſay; but among us good *freethinking Proteſtants* of *England*, *Abſtinence*, *Temperance* and *Moderation*, (at leaſt in *Eating*) are ſo far from

from being thought a *Virtue*, or their Contrary a *Vice*, that it would ſeem, not eating the fatteſt and moſt delicious, and to the *Top*, were the only *Vice* and Diſeaſe known among us, againſt which our *Parents*, *Relations*, *Friends* and *Phyſicians*, exclaim with great *Vehemence* and *Zeal*; and yet, if we conſider the Matter attentively, we ſhall find there is no ſuch Danger in *Abſtinence*, as we imagine; but, on the contrary, the greateſt *Abſtinence* and *Moderation Nature* and its *eternal Laws* will ſuffer us to go into and practiſe for any Time, will neither endanger our *Health*, nor weaken our *juſt Thinking*, be it ever ſo unlimited or unreſtrain'd.

2. *HEALTH*, *Chearfulneſs* and *Activity*, (as they are bodily Affections) conſiſt in the *eaſy*, *equable* and *regular* Performance of what is commonly called the *animal Functions*, *viz.* thoſe of *Digeſtion*, *Circulation*, *Reſpiration*, *Perſpiration* and the *Secretions*.

3. *FOOD* (that is *Meat* and *Drink*) was deſign'd only to ſupply the Expences of *Action* and *Living*, or the Expences of thoſe natural *Functions* now mention'd; that is, to repair the neceſſary Loſs caus'd by the Action of the *Fluids* that ſurround us, or the internal *Action* of thoſe within us, while they are performing theſe *Functions*. Before our Bodies arrive at perfect *Maturity*, and while our *Solids* and

Organs

Organs are tending to their utmoſt *Extenſion*, this Supply may be more than the mention'd Expence, *viz.* what is neceſſary to *ſtretch*, *extend* and *plump* up theſe *Solids* and *Organs*: But after that, when come to *Maturity*, it needs only to be *equal*, if we deſire to continue under the *Order* and Deſign of *Nature*.

4. FOR the pleaſant and regular Performance of theſe *Functions*, it is neceſſary in the Order of *Nature*, not only that the whole *Syſtem* of *Tubes* be full of a warm, ſoft, balſamic Fluid, to maintain them in their due *Extenſion* and *Elaſticity*; but that the internal and external *Surfaces* of the *Solids* be moiſten'd and lubricated, to keep them pliant and *flexible*, (which ſeems to be one great Deſign of *Food*) and likewiſe to preſerve them from the Friction of the internal and external ſurrounding Fluids, and their Friction on one another; and this muſt be ſecreted from the ſame *Maſs* of Fluids in the *Tubes*.

5. *HUNGER* is a Senſe of Pain, ariſing from the partial *Exinanition*, or emptying of theſe *Tubes*, by the Expences of *Action* or *Living*, or by the continued Performance of theſe neceſſary *Functions*; whereby the *Tubes* are in ſome meaſure emptied, and a ſufficient Quantity not flowing into the *Capillaries*, and the *perſpiratory* and *emunctory Glands*, of which

which they are form'd, that *balmy Film* or *Cuticule* which defends the moſt ſenſible *Fibres, viz.* the *Sides* and *Orifices* of the *ſecretory* Veſſels, and the Sides and Coats of the *Nerves*, that of the *Stomach* eſpecially, (which is nothing but a Bag compos'd of ſuch *Nerves* and *ſecretory Glands*) is gradually worn off; and a ſharp, uneaſy *Senſation*, *Languor* and *Debility*, is thereby produc'd and felt over the whole Solids of the Body, (but eſpecially in the *Stomach*) till a ſufficient Quantity of this *balmy Fluid* be ſupplied again, to ſheath and defend theſe ſenſible *Fibres* from being ſcrap'd and worn. But if this *milky* Subſtance be long and obſtinately denied, the *Pain* becomes ſo intolerable, that no kind of Torture can equal it.

6. FROM hence it ſeems to me pretty evident, that *Temperance*, or, if you pleaſe, *Abſtinence*, (contrary to the Nature of ſome other of the Virtues) ſeldom admits but of one *Extreme*, *viz.* the *too-much*, or *too-high* in Food: For upon any Attempt being made upon the *too-little*, habitually and for a Continuance, the *Pain* becomes ſo intolerable, that no Perſon at *Liberty*, and in his *Senſes*, and having proper Materials for Food in his Power, can poſſibly bear it: As is well known to thoſe who have ſeen, or read of, the Effects of *Famine*, or ſtarving in *Priſons*, long *Sea-Voyages*, or *Deſarts*; which is deſcribed by all

to

to be a Torture equal to that of being burnt alive by a *ſlow Fire*, or greater, if poſſible.

7. If this Repreſentation be juſt, it will be evident, that for *Health*, *long Life* and *Serenity*, the ſureſt and moſt effectual Mean is a conſtant Endeavour and ſteady Practice of takeing down the leaſt we can be eaſy under, or are equally agile, and capable of intellectual Exerciſes after, or a Trial to reach the *too-little*, if poſſible. This I take to be the ſhorteſt, ſafeſt, and moſt effectual *Rule*, a wiſe Man can go by. In bodily *Wiſdom*, it is the *one Thing neceſſary*; all other Means are but Trifles in reſpect of this; and this alone is ſufficient to keep a Man free from great or habitual *Diſtempers*, *Lowneſs*, and the Infirmities of *Age*; and to procure him a *Diſſolution* without violent Pain, as far as the Laws of Mortality, and the Deſigns of his Maker over him, will permit; for all Men are not made for one and the ſame End and Purpoſe, in the Deſigns of Providence, or *God*'s moral Government of his Creatures.

8. Hence it will be evident, with how little Reaſon the guarded, the complaiſant and the cautious Dealers in *Phyſic*, *perplex*, *puzzle* and *terrify* thoſe, who by a low abſtemious *Regimen*, are endeavouring to conquer their *bodily Diſtempers* or *ſpiritual Vices*, *viz.* by *thundering* over them, or *ſneering* at them, that

that they are *ruining* their Conſtitutions, *ſpoiling* their Blood and Juices, *creating* Diſtempers, and *ſhortening* their Days, by this their *whimſical, wrong-headed* and unnatural *Abſtinence*. But ſurely ſuch have little ſtudied Nature, and the *animal Oeconomy*; for it is as impoſſible that a *free*, ſenſible Perſon, under *Plenty*, ſhould be long able obſtinately to continue under the *too-little*, as it would be for him to ſtop the *Sun* in his Courſe. If there be Inſtances or Records of any ſuch, they have been *wrong-headed* indeed, or *lunatic*, or under the Influence of ſome unnatural *Paſſion*, which is the ſame Thing: And *Self-murder* may with, as much Propriety, be inſtanced againſt the innate Principle of *Self-preſervation*, as this is inſinuated againſt *Abſtinence* and Moderation in Diet; for ſuch as I have now mention'd is the *Law* of *Nature*, and the *Exceptions* muſt be unnatural and *monſtrous*. I have often tried, for a few Days, to approach the *too-little*, for the Cure of *Lowneſs*, *Oppreſſion* and *Watchfulneſs*; but never could carry it above *three* or *four* Days, (when otherwiſe free from a form'd *Diſtemper*) after which my *Symptoms* were leſſen'd, and *Hunger* became then my greateſt *Diſeaſe*.

9. One conſtant *Symptom* of a beginning Diſtemper, of what Denomination ſoever, is at leaſt ſome Degree of *Inappetence*, *Nauſea*, *Loathing* or Heavineſs after a full Meal, or an Aver-

Averſion to ſtrong animal Food; the Cauſe of which, as far as I can conceive, is a *Labour*, Struggle, or Difficulty, in the Performance of the mention'd *animal Functions*; for the *Cure* and Relief of which (whatever elſe is adviſ'd) all honeſt and experienc'd *Phyſicians*, *Ancient* or *Modern*, adviſe an appropriated low Diet or *Regimen*. The *Solution* and *Cure* of all Diſtempers by Nature, when ſolely left to her wiſe Conduct, is by this *Inappetence*, *Loathing*, or *Abſtinence*, at firſt; and then by ſome one Evacuation or other, as *Sweat*, *Stool*, *Spitting*, *Coughing*, *Hæmorrhage*, or throwing the *morbid* Matter on ſome diſtant Limb or Joint; which always happen after an intermediate *Struggle* and *Labour* of the whole *animal Oeconomy*, to concoct the *peccant Humours*, and fit them for *Extermination*. From whence it will be plain, to thoſe who will obſerve and imitate *Nature*, that ſuch Medicines as help Nature to concoct and fit the *peccant Humours* to be readily thrown off, with a *Regimen* and proper *Evacuations*, are the moſt material *Indications* in the *Cure* of *Diſtempers*.

10. *MEDICINE* has two Branches, the *Sanative* and the *Preſervative*: In the *Sanative*, by the *Viſcidity*, *Acrimony* or *inflammatory* State of the Juices, the *Inappetency*, and the diſtemper'd *Film* or *Cuticle*, that covers the internal and external Surfaces of

of the *Stomach* and *Organs* deſcrib'd, may be ſuch, that *Nature's* Laws, of Craveing and Hunger, may be ſuſpended for a while, till ſhe has thus prepar'd the *morbid Juices* for *Elimination*, by a *Diſtemper* and its *Cure*; and then *Medicine* and *Experience* muſt direct for her, with what Food ſhe is to be beſt maintain'd and ſupported, till ſhe be brought to her natural State again: and the *Regimen*, in ſuch a Caſe, is allow'd by all *Phyſicians*, to be the *lighteſt* and the *leaſt*, *viz.* of the appropriated Food, for obviating and *antidoting* ſuch a particular Diſtemper. Here then there is no Controverſy, *Diſeaſes* being an unnatural State of an *animal* Body: 'Tis therefore of the *preſervative* Branch of Phyſic, that what is here maintain'd is to be underſtood; about which I affirm, the moſt infallible and univerſal *Mean* of preſerving *Health*, *lengthening Life*, and preventing Diſeaſes, is, conſtantly to endeavour to take the *lighteſt* and the *leaſt* Food (that is, Meat and Drink) a Man can be tolerably eaſy under, equally agile, and fit for intellectual Exerciſes after.

II. THE *Practice* of *Phyſic* may be conſider'd in three very different Lights. There is the *Medicina Philoſophica ſeu Rationalis*, whereof true natural *Philoſophy* is the Stem or Root, and practical Medicine but a Branch. From *natural Philoſophy*, the *Phyſicians* muſt learn the Structure and Uſes of the ſeveral *Organs* of

of the *animal* Body, and the Laws of the *animal Oeconomy*; and from the *Symptoms* and Appearances on that Foundation, draw out his *Intentions* in any given Caſe or Diſeaſe. From the ſame *natural Philoſophy*, he muſt make himſelf acquainted with the *Nature, Uſes* and *Virtues* of the *Materia Medica*, or the Materials commonly uſed in *Medicine*, and to the *firſt* adjuſt this *laſt*, in order to *antidote* the Cauſes of a given Diſtemper; and he who is the beſt *natural Philoſopher* will, *cæteris paribus*, ever be the beſt *Phyſician*. *Pharmacy* is of a lower Order, and like *Cookery* in Diet. Then there is the *Medicina Expectativa*, which conſiſts in keeping up the *Patient*'s Hopes, Expectations and Spirits, till Nature points out clearly the principal Cauſes and great *Symptoms* in *acute* Diſeaſes; and in *chronical* Caſes, till *Air*, *Exerciſe* and *Regimen* have taken Place. And this Branch of *Phyſic*, in *low* and *nervous* Caſes, and weak and *wrong-headed* Patients, is abſolutely neceſſary, to keep them from Unconſtancy and changing Hands; and ſo, at leaſt, is a neceſſary *Art* for a Phyſician, towards thoſe Patients who cannot diſtinguiſh between *Surfaces* and *Solids*. Many a groſs Glutton has been cured by a Ring of Changes of *Coral*, *Crabs-Eyes* and *Pearl*, with *Aſſes Milk*, to damp his *voracious* Appetite, who could not have borne the word *Abſtinence*. And, laſtly, there is the *Medicina ad Euthanaſiam*, which, when the Caſe is plainly

and abſolutely *Mortal*, lays the Patient down in Death with the leaſt Pain. But as this is ſeldom a certain Caſe, in *chronical* Illneſſes at leaſt, except in very tedious Diſeaſes, and Patients worn out by *Age* and *Diſtemper*, it ought to be practiſed only like *Extreme Unction*. Theſe two laſt kinds of Knowledge in Phyſic, though ſoon learn'd, as being readily to be met with in every good Book of *Pharmacy* or *Medicine*, yet could never ſtrike my *Fancy*; I always ſought after a ſolid and durable *Cure* of Diſtempers; and was for ſtriking at the *Root* of the Weed, leaving the picking of the *Suckers* and *Leaves* to others; though in *acute* Caſes, that often turn on ſmall Things, all Oars are to be plied, and every Art ſtudied, and even the moſt trifling Mean, conducive to the End, attended with Diligence.

12. I HAVE a due Eſteem for the *Philoſophers* and *wiſe Men* both of *Antiquity* and *later* Ages; thoſe who have labour'd to cure the Diſeaſes of the *Mind*, and thoſe who have ſuggeſted effectual *Means* for the *Cure* or *Relief* of the Diſtempers of the Body; as well as for thoſe who have diſcover'd the *Wiſdom* and *Beauty* of the *Works* of the *Author of Nature*. The *Chriſtian Philoſophy*, repreſented in its true Light, is infinitely beyond any thing that ever was thought of, or could poſſibly enter into the Heart of Creatures to imagine, for extirpating the *Diſeaſes* of the *Mind*, as

is

is allow'd even by its *Adverſaries* themſelves: For remedying the Diſtempers of the *Body*, to make a Man live as long as his original *Frame* was deſign'd to laſt, with the leaſt *Pain*, feweſt *Diſeaſes*, or Loſs of his Senſes, I think *Pythagoras* and *Cornaro* (for ſuggeſting a general and effectual *Mean*) by far the two greateſt Men that ever were; the *firſt*, by *vegetable* Food, and *unfermented* Liquors; the *latter*, by the *lighteſt* and the *leaſt* of *animal Food*, and naturally fermented Liquors. Both lived to a great *Age*: But what is chiefly to be regarded in their Conduct and Example, both preſerv'd their *Senſes*, *Chearfulneſs* and *Serenity*, to the laſt; and, which is ſtill more to be regarded, both, at leaſt the laſt, *diſſolv'd* without Pain or Struggle; the firſt having loſt his Life in a Tumult, as is ſaid by ſome, after a great Age of perfect Health.

13. The *loweſt Diet*, or one of a *Milk*, *Seeds* and *Vegetables*, ſeems only neceſſary and appropriated to thoſe, who by their *own*, or by the *Fault* of their *Parents*, have extremely vicious Juices, either *too hot*, *too ſalt* or *too viſcous*, and are conſequently ſubject to the neceſſary Effects and Diſeaſes of ſo *diſtemper'd* Fluids, which *Milk*, (being white Blood) *Seeds* and *Vegetables*, are more ſpecifically qualified to *antidote* (for it is the Juices only ſuch a Diet alters or mends). There is another *Order* of human Bodies, for which this *Regi-*

men ſeems alſo particularly proper, *viz.* thoſe who have a *ſharp* and *large* Appetite, or great and over-ſtretch'd *Stomachs* by their *Frame*, or by former *Luxury*, *Intemperance* and *Lazineſs*; and conſequently *lax* and weak *Solids* and *Organs* of *Digeſtion* are utterly incapable to concoct, grind and perfectly digeſt any Quantity of animal Food, or bear *ſpirituous* Liquors; this *Diet* to ſuch is not unlike the Method commonly uſed by *Jockies* to cure their *Horſes*, when their *Corn* paſſes through them undigeſted and entire, which is to mix it with *Straw*. For other Perſons tolerably well and ſound, the lighteſt and the leaſt of common Diet, is the more *univerſal* and ſafeſt Regimen, as Experience ſhews by its being common; for *God* and *Nature* do nothing in vain.

14. ONE great Advantage a *vegetable* Diet has over an *animal* one, is, that in the weakeſt *Digeſtions*, and the moſt dangerous and obſtinate Diſtempers, the *Patient* may always fill his Belly, and ſatisfy his *Hunger*, without Fear, Remorſe or Suffering; at *leaſt*, he may do it to a great Degree, till he comes to be far advanced in Years: and if he ſhould happen at any time to exceed, he feels none of thoſe *pungent* and *acute Symptoms*, nor thoſe durable Effects and profound *Sinkings*, he would feel from a full Meal of *high* Meats and *ſtrong* Drinks. And this is no ſmall Comfort to thoſe who are under a dangerous Diſtemper, or have

a great Degree of *Senſibility*. The common and neceſſary *Calls* for Food returning ſo often, it would be a painful and intolerable Conſtraint to be confin'd to an everlaſting Guard and *Attention*, and to eat and drink by Weight and Meaſure; to live thus *medicè* is to live *miſerè* indeed. But a *vegetable* Diet, in a great meaſure, frees the Patient from all thoſe continually recurring *Snares*, Dreads, and conſequent Sufferings; for not only the *Temptation* to *Exceſs* is much leſs, but the Effects of *Exceſs* are little or none in Compariſon of thoſe of high *animal* Food and *rich Wine*. Add to this, that the *Secretions*, and other *animal Functions*, are more regular and freely performed, under a full Diet of *vegetable* Food, than they can poſſibly be under that very ſpare and ſmall Quantity of *animal Food*, and fermented Liquors, that is abſolutely neceſſary to be obſerved in a great many *Caſes*, as moſt *Patients* and all *Phyſicians* know; and thus being able to take down a much greater (for Inſtance, a quadruple) Quantity of *vegetable* Food, than would be fit for them to take of *animal* Food, and *fermented* Liquors, the now over-ſtretch'd and relax'd Bowels and Veſſels may be kept fuller, the *Secretions* will be more plentiful, and all the *Capillaries* pervious and fill'd; which under the neceſſary *ſpare Diet* of very little *animal* Food and *fermented* Liquors, might, for want of proper Liquor, dry up and *coaleſce*; and ſo the Animal be de-

priv'd of many *Glands* and *Arteriolæ*, in which all the Delicacy of Life conſiſts; beſides that it puts a Drag on the Wheels of Life, to hinder it from running down too faſt.

15. A PLAIN, natural, and *philoſophical* Reaſon, why *vegetable* Food is preferable to all other Food, is, that abounding with few or no *Salts*, being *ſoft* and *cool*, and conſiſting of Parts that are eaſily divided and form'd into *Chyle*, without giving any *Labour* to the *digeſtive* Powers, it has not that Force to open the Mouths of the *Lacteals*, (if they really have any opening into the Inteſtines, which *Leuwenhoeck* and all accurate *Anatomiſts* deny) to diſtend their *Orifices*, and excite them to an unnatural Activity, to let paſs too great a Quantity of *hot* and *rank Chyle* into the Blood, and ſo overcharge and inflame the *Lymphatics* and *Capillaries*, which is the natural and ordinary Effect of *animal* Food, and therefore cannot ſo readily produce Diſeaſes. There is not a ſufficient *Stimulus* in the *Salts* and *Spirits* of *vegetable* Food, to create an unnatural *Appetite*, or violent *Cramming*, at leaſt not ſufficient to force open and extend the Mouths of the *Lacteals*, more than naturally they are or ought to be. Such Food requires little or no Force of *Digeſtion*, a little gentle *Heat* and *Motion* being ſufficient to diſſolve it into its integral Particles, and into a thin watery *Emulſion*, ſuch as is *Chicken Water*, *Aſſes Milk*, or *thin Broth*, which

which is all that is required for the Purpoſe of *Nutrition*, and all of the Food that can enter the *Lacteals*: So that in a vegetable Diet, tho' the ſharp Humours in the *Primæ Viæ*, an extended *relax'd Stomach*, and ſometimes a delightful *Piquancy* in the Food, may tempt one to exceed in *Quantity*; yet rarely, if *Spices* and *Sauces* (as too much *Butter*, *Oil*, *Salt* and *Sugar*) are not join'd to *Seeds* and *Vegetables*, can the Miſchief go further than the *Primæ Viæ*, or *Stomach* and Bowels, to create a preſent Load, Sickneſs, Vomiting or Purging, by its acquiring an *Acrimony*, from its not being receiv'd into the *Lacteals*; ſo that no more being admitted into the Blood, than the Expences of *living* require, *Life* and Health can never be endanger'd on a *vegetable Diet*. But all the contrary happens under an *high animal Diet*.

16. As for *fermented Liquors*, they ſeem to me by no means an Inſtitution of Nature and its *Author*, nor fitted for Health and long Life: But, on the contrary, if we may credit the *Jewiſh Records* and their *Lawgiver*, it is certain, that fermented Liquors (*Wine* eſpecially) were unknown till the *Deluge*; and the firſt Experiments produced both *Drunkenneſs* and *Inceſt*, even on the *venerable* Heads of that Family, which was the only one thought worthy to be ſav'd in the univerſal *Deluge*. It is well known, that fermented Liquors de-

stroy the Digestibility, *i. e.* the *Putrefaction* and *Dissolution* (for *Digestion* is nothing else) and easy Concoction of all *animal Food*; and *common Sense* will tell us, that the purest and thinnest *Water* is fittest to *circulate* through *Tubes* so infinitely small, as some of animal Bodies are; and even that it alone will nourish *Plants*, and bring them to *Maturity* and *Perfection*. And as to the common *drunken Sneer*, that fermented Liquors *tann* the *Solids*, and strengthen the *digestive* Organs, it is a mere *unphilosophical* and insipid *Joke*, contrary to the known *Axiom* in all just Reasoning, that if *Equals* be added to, or subtracted from *Equals*, the *Sum* or *Remainder* will be *equal*; and so, if it thickens the Juices, and hardens the Food, (as it necessarily must) as much as it *tanns* and strengthens the Solids, it can still produce nothing but the Diseases of *sizy* Blood and *unelastic* Solids at last. Fermented Liquors may be good Medicines and present Reliefs on Fatigues, Lowness, *epidemical* Distempers, and inclement Seasons, or in *Extremities* for a *Filip* or present *Spur*; but they can never be so proper to circulate through *Tubes* so small as the *six hundredth Part of an Hair*, or to preserve them from Rupture and Corrosion for any considerable Time, as fair sweet Water. As to *Spirits* and Liquors that have pass'd through the Tortures of the Fire, they are only of modern Invention *, and *Otto-*

* Vide *Freind's* History of Physic.

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man Extraction, as is known from *Hiſtory*; and are of ſuch Uſe as the blowing up of an Houſe in an univerſal Conflagration, to ſave ſome Palace, *viz.* Life itſelf, when in Danger: Neither were they ever deſign'd by *Nature* and its *Author* for an animal Body, as Nouriſhment, or common Drink, and ſcarce deſerve a Place in the *Apothecary*'s Shop; *Spirits* having made more Havock among Mankind, by far, than even *Gun-powder*.

17. If we attentively conſider the laſt *Scenes* of moſt People, and how it is they die, and with what *Symptoms* they expire; we ſhall conſtantly find it to be of the *too-much*, the too-high, or too-hot; and not of the too-little, or too-cool. They either go off in a *Diarrhea* or *Hæmorrhage*, an acute or ſlow *Fever*, *Fits* or *Convulſions*, an *Aſthma* or Difficulty of Breathing, a *Syncope* or fainting Fit, (from ſome great and incurable precedent Evacuation) I mean ſuch as die before the Term of the natural Duration of Life is expir'd, and not of *old Age*, or natural Weakneſs: All theſe die violent and unnatural Deaths, as really as thoſe who ſuffer by the Hand of Juſtice, as is evident from their *Symptoms*, the Nature and Cauſe of their mortal Diſtempers, and the Violence and Acuteneſs of their Pains and Sufferings, while they are wearing out and *agonizing*. Whereas thoſe who ſtudy and conſtantly practiſe the *lighteſt* and

and the *leaſt*, (bating Accidents and *epidemical* Diſtempers) generally die and diſſolve gradually, their *Senſes*, *Faculties*, *Spirits* and *Serenity* holding out to the laſt: They have ſeldom violent or acute Sufferings; they deſcend out of *Life* as they aſcended into it; *the latter End of ſuch is Peace*, at leaſt as to their bodily Machine, and in Compariſon of the *Agonies*, *Tortures* and *Wheel-breakings* of the *firſt*: at the very leaſt, this is the natural Conſequence of ſuch a *Regimen*; as is conſtantly ſeen in thoſe who rigidly and ſtrictly follow *Nature* and its *Laws*, which in *Regimen* is to deſcend into Water-gruel, Milk-porridge and Water-pap, as they aſcended from it in common Life; or in practiſing to the laſt the *lighteſt* and the *leaſt*. *Cornaro*, in the laſt Part of his Life, liv'd 24 Hours on the *Yolk* of an *Egg*; many have done ſo on a Diſh of Milk, Chocolate, or Milk-Tea; and moſt of thoſe who have run out to the natural Duration of Life, have thus departed, as is well atteſted and confirm'd by *Hiſtory* and Obſervation.

18. In a word, *Nature*, or, which is the ſame Thing, *God*, *the Author of Nature*, cures every Diſtemper, *acute* or *chronical*, (for *chronical* Diſtempers are only diluted, weaken'd and lengthen'd *acute* ones, differing only in Degrees and Duration, and a quick and ſlow, a labouring and a free, an intermitting and continued, a ſimultaneous and a drawling Pulſe,

Pulſe, are the *Criteria* by which we denominate Diſtempers under this Diviſion) which *He*, or ever it, cures, by a *Nauſea*, Loathing, or Inappetency to Food of any Sort, but particularly to all *animal* or ſtrong Meats or Drinks; then by the *Symptoms* of the *ſpecific* Diſtemper, as *Headach*, *Reaching*, *Heat*, *Thirſt*, *Inflammation*, Pains in all, or particular Parts, Difficulty in Breathing, *Throws* and *Convulſions* in the Bowels, Anxiety, Dread, *panic* Terror, Chillneſs, Loſs of Senſes, and the conſiſtent Uſe of the *Faculties*; all (or ſome) of theſe, according to their Nature, and Violence of the Diſtemper, reſpectively: And theſe either in a continued *Series*, or by Fits and Intervals of Eaſe, which is the *Oeconomy* of the *Author of Nature*, to labour, grind and concoct the morbid Matter and the *material* Cauſe of the Diſtemper, moſt univerſally produc'd by a *Mal-regimen* and improper Food; and when this Matter is ſufficiently concocted by the Diſtemper, then comes the *Criſe*, to throw it out of the Habit by ſome Evacuation or other, as *Sweating*, *Vomiting*, *Purging*, *Hæmorrhage*, *Urine*, or *Coughing* and Spitting. This is the conſtant *Oeconomy* and Courſe of Nature in the Cure of Diſtempers, and ought to be a *Pattern* and *Model* for *Phyſicians* to go by in their *artificial* Cure of Diſeaſes. And ſince *God* and *Nature* do nothing in vain, it would ſeem as if infinite Wiſdom had laid down theſe *ſimi-*

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lar Hieroglyphics, Pictures and *Inſinuations*, to teach us how to manage in *ſimilar* Caſes; for the ſilent Language of the *Deity* to us in this our lapſed State, without Violence on our Liberties, can be no otherwiſe than by ſuch natural *Cauſes*, *general* Laws, *Hieroglyphics* and *Analogy*, by which we may learn of and imitate Him, as near as we can, in all we do or think.

19. I AM of Opinion, if it could be poſſible to perſuade thoſe who are tolerably well, and are oblig'd to follow a ſedentary Occupation, and to uſe their Heads and intellectual *Organs* in their Profeſſions, to give over all fermented Liquors, but on extraordinary Occaſions; to abſtain from *animal* Food in *Spring* and *Autumn*, but eſpecially in the hot Months, when Fruits and Garden-ſtuff are in their Perfection, and to follow Nature in the Products of the *animal* and *vegetable* Kingdom, according to the Seaſons of the Year; the *Spring Animals* and *Vegetables* being more aqueous, tender, and freer from *Salts* and *Oils*; the *Autumn* Foods being ſomewhat richer; but the *Winter* ones having attain'd their greateſt Perfection of Concoction and Maturity; ſuch Perſons would go a great way to preſerve their *Health* and *Serenity*, with few Diſeaſes, *epidemical* or acquir'd: For in the Spring, all Nature is under an univerſal *Fermentation*, to throw off Crudities and Morboſity: And it is a wiſe Providence

dence that *Lent-time* falls out at that Seaſon, which, if kept according to its original Intention, in *Seeds* and *Vegetables* well dreſs'd, and not in rich high-dreſs'd *Fiſh*, infinitely more deſtructive of Health than plain-dreſs'd *Fleſh*, would go a great way to preſerve the Health of the People in general, as well as diſpoſe them to Seriouſneſs and Reflection: So true it is, that *Godlineſs has the Promiſe of this Life, and that which is to come.* And it is very obſervable, that in all *civil* and *eſtabliſhed* religious Worſhips, hitherto known among *policy'd* Nations, *Lents*, Days of *Abſtinence*, Seaſons of faſting and bringing down the *brutal* Part of the rational Creature, have had a large Share, a ſtrict Obſervance, and been reckon'd an indiſpenſable Part of their Worſhip and Duty, except among a wrong-headed Part of our *Reformation*, where it has been deſpis'd and ridicul'd into a total Neglect; and yet it ſeems not only natural, and convenient for *Health*, but ſtrongly commanded in the Old and New *Teſtament*, and might allow Time and proper Diſpoſition for more ſerious and weighty Purpoſes: And this *Lent*, or Times of Abſtinence, is one Reaſon of the *Chearfulneſs* or *Serenity* of ſome *Roman Catholic* and *ſouthern* Countries, which would be ſtill more healthy and long-liv'd, were it not for their exceſſive Uſe of *Aromatics* and Opiates, (which are the worſt kind of dry Drams) and is the Cauſe of their un-

unnatural and unbridled Leachery, and Shortneſs of Life.

CHAP. II.

Of the Nature *and* Cauſe *of the* Diſorders *of the* MIND, *ſo far as they depend upon the* Body.

1. UPON the ſtricteſt *Enquiry*, and moſt anxious Examination, I could never find a *natural* and *philoſophical* Cauſe for, or Account of, *Ideotiſm*, *Stupidity*, Loſs of *Senſes*, *Memory*, or *Judgment*, for *Lunacy* or *Madneſs*, or of any of thoſe Diſtempers that are called *Cephalic* or *Nervous*, or which is attended with a *Deviation* from what is called *common Senſe*, or *juſt Thinking*, but an *Obſtruction*, *Extinction*, *Relaxation*, or *Malformation* of the proper Organs (which are commonly reckon'd the *Nerves*, or their *Membranes*; for they are membranous *Tubuli*, fill'd with a milky Liquor, like the Pith of a Ruſh, to keep them moiſt and *elaſtic*, and Membranes are the only true *elaſtic Organs* of an animal Body); by which the Mind acts uniformly or regularly: And therefore, in all Nature, I could never find ſo *luciferous* and expreſſive an *Emblem*, or *analogous* Similitude of the Operations of the *Mind* on the *Body*, in its intire

intire and perfect Health, as that of a skilful *Musician* playing on an harmonious and well-tun'd *musical* Instrument.

2. I CANNOT see any *essential* or *philosophical* Difference between a *Man* and an *Angel* appearing to our Senses under an *human* Form (as it is *alledg'd* that *Angels* and *Spirits*, of an Order superior to ours, have actually done); I say, I can, in true *Philosophy*, conceive no Difference between an *Angel* appearing and acting in an human Form, and a real *Man*, either in Nature or Kind, but only in Degree: So that, to me, a *Man* is a diminutive *Angel*, shut up in a Flesh Prison or Vehicle; and an *Angel* appearing in an *human* Form, is a superior human Spirit, for that Time cloathed with some sensible *Vehicle*, and acting by and upon material *Organs*, divinely fram'd; and both are, in reality, no other than a *Musician* shut up in a fine *Organ* Case. In the same Manner, and from the same Causes, I see through a *Microscope*, a *Telescope*, or *Spectacles*, as through my own fleshly Eyes; by the same Laws likewise I hear and speak through a *Trumpet*, as with my *Ears* and *Mouth*, and feel through a fine *Lawn* or *Membrane*, as by my outward *Skin*, only more or less distinctly; and, if the artificial *Organs* be well contrived, and duly form'd, it is much in the same Manner, as to the *sentient* Principle; it is *that* alone, which is the Seat and Principle of all *Sensation* and *Intelligence*.

gence. Material *Organs*, form'd by Art, are much the ſame as natural ones, only the laſt are more nicely and elegantly fram'd.

3. UNLESS a Man give up all *Reaſon*, *Philoſophy* and *Proportion*, as well as *Analogy*, and run into downright *Scepticiſm*, *blind Fate*, *Witchcraft* and *Inchantment*, he muſt ſuppoſe that an infinitely wiſe and beneficent Being could not have created free and intelligent Creatures, but for ſome wiſe End and Purpoſe; and, to obtain this End, muſt have made them, at firſt, ſound in *Body* and *Mind*. How *Error*, *Diſeaſes*, *Miſery* and *Death* commenc'd, may readily be accounted for, from the Abuſe of *Freedom* and *Liberty*, ſpurious *Self-love*, and an inordinate Love of the Creatures: But this is at preſent foreign to my Deſign. But as to the Diſorders of the *Body*, of the *Senſes*, *Imagination*, *Memory*, and ſuch as belong to the *Faculties*, and their *Organs*, they are naturally and *philoſophically* to be accounted for, from *Accidents* only, *Debauches*, *Exceſſes*, and a *Mal-regimen*, gradually ſpoiling and deſtroying this *muſical* Inſtrument, and its ſeveral *Stops* and *Keys*, either in the *Parents* or in the *Poſterity*. I can readily conceive how ſuch a *Debauch* ſpoil'd, obſtructed, or relax'd ſuch a *Set of Glands*, *Nerves*, or *Capillaries*: That an Exceſs in *Punch*, *Spirits*, *Ham-pye* or *Veniſon-paſty*, plaiſter'd up, or obſtructed, one Set of *fine Tubes*; how

how exceſſive *Leachery* diſſolv'd, broke or unbended ſo many *Nerves*, *Fibres* and *Lymphatics*; and how the *crazy* Parents, from vitiated Juices, and rotten or unform'd Solids, brought into the World deform'd *ideotical* Children; how want of *Culture* and Exerciſe of the material *Organs*, neceſſary to *ſpiritual Action* or *Thinking*, render them *callous*, *analeptic* or *tetanous*, (juſt as want of bodily Exerciſe, and a *Mal-regimen*, produce a ſimilar Effect on the Limbs and groſſer *Organs*) and ſo communicated the ſame Infirmities, and diſtemper'd Organs, in *Miniature*, to their wretched Poſterity, and, in ſuch an unnatural *Climax*, tranſmitted *Monſters*, *unnatural* Forms of Body, *Diſorder of Senſes*, *Wrongheadedneſs*, *Ideotiſm*, *ſpurious Freethinking* and *Infidelity*, down to us the laſt Link of the Chain. Thus the Appearances are natural, *philoſophical* and rational; on any other Scheme, all is Darkneſs, Confuſion and *Anarchy*.

4. I HAVE been credibly inform'd, that Sir *Iſaac Newton*, when he applied himſelf to what is eſteem'd the greateſt Stretch of human *Invention* and *Penetration*, (*viz.* the Study, *Inveſtigation* and *Analyſis* of the *Theory* of *Light* and *Colours*) to quicken his Faculties, and fix his Attention, confin'd himſelf to a ſmall Quantity of Bread, dureing all the Time, with a little *Sack* and Water, of which, without any Regulation, he took as he found a

Craving, or *Failure* of Spirits. And the famous Mr. *Law*, Projector of the *Miſſiſippi*, to keep his Head clear, and Faculties acute, in order to obtain a Superiority of Skill in *Game*, liv'd many Years on *half* a Chicken a Day, with about a *Pound* of Bread, and drank nothing but Water or *aqueous* Liquors, and by that Means won great Sums on the Square. Many more Inſtances I could give of great Men in all Ages, and of all *Profeſſions*, who maintain'd their Superiority of Parts, their Attention, Penetration, juſt and cloſe Thinking, by extreme *Temperance* and *Abſtinence*. But I choſe theſe *two*, becauſe they have been, and ſtill are, much diſtinguiſh'd and known in their vaſtly different Ways; and that any one who thinks it worth his while, may be ſatisfied about the Truth of the Facts.

5. THERE are two Sorts of human Race, as different as *the Sons of God*, and *the Children of Men*, *viz.* thoſe whoſe Eminence and Dignity conſiſts chiefly in their *Heads*, *Faculties* and *ſpiritual Nature*, and *thoſe* whoſe great *Uſe* and *Deſign* is to excel in the Exerciſe and Uſe of their *Bodies*, *Limbs* and *material Organs*; or, in one word, there are thoſe *who govern*, and thoſe *who are govern'd*, originally form'd and mark'd out by Nature, and their original *Frame* and *indelible Signatures*: The *laſt* may ſafely, at leaſt for *ſome Time*, wallow

wallow in ſenſual Pleaſures, high and ſtrong Meats and Drinks; but are all the Time in the State of the *Mock-Tyrant of Sicily*, who had a *naked Sword* hanging over his Head by a Hair at his Feaſts; and all ſuch pay an *equivalent* for their *Luxury*, in the *comparative* Shortneſs of their *Lives*; but they do not fear, becauſe they do not think *juſtly*, having generally very blunt and obtuſe *intellectual Organs*. The *firſt* have more delicate and *elaſtic Organs* of *Thinking* and *Senſibility*, and the Pleaſures of that kind in them are beyond thoſe of *Senſuality* in others: they are like fine *Lancets* or *Razors*, that coarſe Uſage will ſoon ruffle and ſpoil; and therefore muſt forego groſs and rank ſenſual Pleaſures, to preſerve their *Organs* of Thinking ſound and intire; otherwiſe their Sufferings will be intolerable, which is the Caſe of all *nervous Hypochondriacal* and *Hyſterical* Perſons; moſt of which were created *Genii*, *Philoſophers* and *Lawgivers*. The *Middle* between both theſe Extremes, are indeed *Mediocria Ingenia*, and their Number great; and when ſuch are ſtrong in thinking and penetrating, their Succeſs is owing to *Chance*, or rather *Providence*, to *Coincidents* and particular Circumſtances, or ſome particular *Set* of *nervous Glands* and *Fibres* in the *Brain*, not quite ſpoil'd or relax'd by the Intemperance of their Parents. This *laſt* Sort may ſometimes produce a *falſe Hero*, *Conqueror*, or admirable *Mechanic* or Tradeſman;

but ſeldom an *honeſt and able Miniſter*, a wiſe *Lawgiver*, or deep *Philoſopher*; and ſeldomer a *Genius*, or a deep contemplative *Chriſtian*. But this admits of infinite Degrees, as all Things meaſur'd by Quantity do, and is more immediately under *God's moral Government* of his World, and nothing but the Event can aſcertain who will be *ſuch*.

6. How much *Diſeaſes*, *Debauches* and *Accidents*, that diſorder or deſtroy the *Organs of Thinking*, influence our Manner of *Thinking*, is ſo obvious, that not only *Philoſophers*, and all the Tribes of *Phyſicians*, but even the *Vulgar* have obſerv'd it, and its Truth is almoſt an *Axiom* of *Common Senſe*. When I ſee a *gloomy*, *melancholy*, *heavy*, *ſtupid*, *thoughtleſs*, *joyleſs* Creature, much more a *whimſical*, *anomalous* or *libertine*, free-liveing or *free-thinking Mortal*, I conclude him in a bad State of Health, under a dangerous *bodily Diſeaſe*, or under a perpetual *Mal-regimen*, which will ſoon terminate in one, whatever Appearances be to the contrary; and ſooner or later, I have been always confirm'd in the Juſtneſs of *this Opinion*, having always found a real, *chronical* or *acute*, ſpecify'd Diſeaſe, to manifeſt itſelf at laſt, and become the *Criſis* of what theſe *Oddities* and Enormities were the remote and elementary *Symptoms*. For I am convinc'd, that *Calmneſs*, *Serenity*, *Chearfulneſs* and *Common Senſe*, (at leaſt in Things level

level to our natural Capacities and Education) and an Esteem and Love of *Virtue*, and what promotes it, are the constant Attendants, and only infallible Symptoms of *perfect bodily*, and *intellectual*, (or of *sana Mens in Corpore sano*) *Health*; and pretending to be wise out of *Common Sense*, or happy out of *Common Life*, is, with me, one of the *Symptoms* of a *cephalic* or *nervous Distemper*. In *England* alone, from *Gluttony* and *Intemperance* in fermented Liquors, and from unguarded *Leachery*, I have been told, that a *late worthy and learned Physician*, that had examin'd into the Numbers confin'd for *Lunacy* and *Madness*, upon the strictest Examination, found they reach'd to a Number I dare not name. And another *Physician* ascribed Wrong-headedness, *gloomy Thinking*, *Melancholy*, *Despondency* and *Darkness* on the *Imagination*, to the abounding of Choler in the *Stomach*, which every one knows to arise from Intemperance and Excess. Whatever be in these *Gentlemens* Observations and Opinions, it cannot be doubted, that the clear, ready and pleasant Exercise of the *intellectual* Faculties, and their easy and undisturb'd *Application* and *Attention* to any Subject, is never to be obtained, but by a free and regular Performance of the natural *Functions*, which, as has been shewn, the *lightest* and the *least* Food can only procure.

7. It is undeniable, that our *concoctive Organs* at preſent are fitted and contriv'd by their *Maker*, for *animal* Food, at leaſt for ſome time; and in the preſent ruinous State of the *Globe* we inhabit, the *Infertility* of the *Earth* in ſome Seaſons and Countries, the Neceſſity of *Labour*, Induſtry and Ingenuity, to draw from it its kindly Productions, but eſpecially for *military* Force and *Proweſs*; *animal Food*, and a *Proportion* of *fermented* Liquors, ſeem extremely convenient and fit, that is, for *mechanical* Force, ſtrong Labour, and bodily *Proweſs*; and, for ſome *Ranks* and *Orders* of Men, indiſpenſable and unavoidable: But, at the ſame time, their Labour and Exerciſe, in ſome Meaſure, *antidote* the Evils and Diſeaſes that naturally muſt follow from ſuch a *Regimen*; tho', generally, they even muſt give up for *it* ſome Part of the *Duration* of their Lives. And even this Neceſſity of animal Food, differs according to the Nature of the *Climat*; the *northern* requiring more than the *ſouthern* Parts. But for thoſe who are under no Obligation of bodily Labour, whoſe *Callings* and *Profeſſions* make a ſedentary Life neceſſary, or whoſe Occupations require only *clear Heads*, great *Attention*, and a free and eaſy Exerciſe of their *intellectual Faculties*, which intirely depend on the eaſy and regular Performance of the animal Functions, either *Pythagoras*'s or *Cornaro*'s *Regimen* muſt be abſolutely

lutely neceſſary, and that of the Laborious, deſtructive and ruinous.

8. OUR *Bodies*, in this preſent State of Things, by their own Nature, and from the Nature of Things within and about us, cannot be brought into abſolute Subjection and Obedience; but we may readily bring them to the preſent *Docility* and Subjection we have of the domeſtic *Animals*; by timouſly *bridling*, *trammeling* and *diſciplining* them, *i. e.* by feeding them coolly and ſparingly, giving them due *Air*, *Exerciſe* and *Cleanneſs*, and *phyſicking* them properly when they grow *rampant*, rebellious, or obſtreperous: And for this very wiſe End is the long *Nonage* of the human Race deſign'd, *viz.* for the due *Culture* of the *Body* and *Spirit*. And thus we might bring our Bodies to the ſame Subjection, at leaſt, that we do our *Dogs* and *Horſes*, and have the ſame Service, Pleaſure and Obedience from them, till we drop into *purer* ones. And it is very obſervable, that all kinds of Food that are *inſipid*, *mild*, *cool* and *watery*, whether of Meats or Drinks, are *ſalutary* and *curative*, *prolific* and *lengthen* Life: and on the contrary, every thing in Food that is much *taſty*, *poignant*, *hot*, *ſalt*, *ſharp* or *ſtimulating*; is *pernicious*, *deleterious* and *morbific*, and deſtructive of Life and Spirits, and that in Proportion to the Degree of their *Sapidity* and *Deliciouſneſs*; and all this, without Exception

tion or Limitation, I think: So wiſely are Things contriv'd, that *ſenſual Pleaſure* naturally and neceſſarily produces *Pain*; and *Virtue* and *Temperance* beget *Happineſs* and *Health*; and that in every Inſtance. *Virtue* and *Happineſs*, *Order* and *Peace*, *Self-denial* and *Serenity*, *Vice* and *Miſery*, *Luxury* and *Pain*, *Rebellion* and *Puniſhment*, are natural, phyſical and neceſſary *Cauſes* and *Effects*.

9. OUR *Paſſions* and *Prejudices* are the great Obſtacles to all our juſt and ſolid *Thinking*, as well as our Acquiſition of *Virtue*. *Pride*, *Self-ſufficiency*, *Ambition* and *Malice*, make us deſire and wiſh that our Opinions were true: *Opinions*, *Syſtems* and *Maxims*, lightly receiv'd, ſhut up our Minds from receiving or attending to more Light, from *Tradition* or *Experience*: *Luxury*, *Riot* or *Leachery*, deſtroy the *Organs* of our Faculties; all together make *Virtue*, deep and juſt Thinking, not only not *amiable*, but exceeding *painful* and difficult; and we determine to be againſt *them*, becauſe they are and muſt be eternally againſt *us*. Now the *lighteſt* and the *leaſt*, by makeing us healthy, chearful and eaſy, moderats and reſtrains all theſe; it cools our Blood and Juices, *weakens* our *Paſſions*, fixes our *Attention*, and makes *intellectual* Enjoyments and Purſuits eaſy and delightful, and the Acquiſition and Practice of the *Virtues* natural and ready.

10. TAKE

10. TAKE a *Child* of healthy Parents, coming into the World in ſuch Perfection of Body as is common to the *middling* Rank; let him be ſuppos'd to be always manag'd, as to *Diet*, nearly by the above-mention'd *general Rule, viz.* the *lighteſt* and the *leaſt*; and that *Air* and *Exerciſe* be join'd to form his *Organs*; let his Mind be at the ſame time cultivated by all the proper Means of Knowledge, Wiſdom and *Philoſophy*, during his Youthhood; and let him in *Manhood* act that Part his *Genius* and Vocation fit him for; at, or towards *Fifty*, let him begin gradually to abate of his Food, both in *Quantity* and *Quality*; and at laſt *deſcend* out of Life, as he *aſcended* into it, by being fed, exercis'd and air'd, as he was in his *Youth*; he will then go down to the *Grave* with his *Spirits*, *Senſes* and *Faculties*, and the whole Compound perfect and intire, without great Diſtempers, violent Pains, or Lowneſs and Oppreſſion (at leaſt, ſuch is the natural Effect of thoſe Means and Cauſes); becauſe the Blood and Juices will always be ſweet, cool and fluid, and conſequently can meet with little or no *Reſiſtance* in their *Circulation* or *Secretions* (which alone is the Cauſe of Pain). It is of ſuch a *Man*, and of ſuch a *Life* alone, that we are to judge of the Happineſs or Miſery of our preſent State of Being (all the reſt being the Works of our Hands, and the Effects of our own Choice);

and

and not from the groſs *Miſmanagements* and *Irregularities*, *Accidents*, or unnatural Appearances of a few *monſtrous* or *preternatural Individuals:* As in *Plants*, we judge of their Nature, *Species* or *Tribe*, by the faireſt, fulleſt grown, and beſt cultivated; and not by any irregular or *monſtrous* Production.

II. I HAVE already ſaid, that true *Mania's*, real *Lunacy*, *Madneſs*, and a diſorder'd Brain, (a Diſeaſe by which ſo ſhamefully many ſuffer in *England*, and thoſe of the beſt Kind, and many of them of diſtinguiſh'd Parts) can poſſibly be accounted for, from no other natural Cauſe, but a *Mal-regimen* of Diet; and the beſt *Phyſicians* have no other Method of curing ſuch *Diſeaſes*, but great, proper, and frequent *Evacuations* of all kinds, Vomits eſpecially, with a *low Diet*, and then bracing by *Vegetables*, *Aſtringents* or *cold Baths*; all the reſt are but trifling. But People think they cannot poſſibly ſubſiſt on a little *Meat*, *Milk* and Vegetables, or any low Diet; and that they muſt infallibly periſh, if they ſhould be confin'd to *Water* only; not conſidering that *nine* Parts in *Ten* of the whole Maſs of Mankind are neceſſarily confin'd to this *Diet*, or pretty nearly to it; and yet live with the Uſe of their *Senſes*, *Limbs* and *Faculties*, without Diſeaſes, or but *few*, and thoſe from *Accidents* or *epidemical* Cauſes; and that there have been *Nations*, and now are Numbers of *Tribes*, who voluntarily confine

fine themſelves to *Vegetables* only; as the *Eſſenes* among the *Jews*, ſome *Hermits* and *Solitaries* among the Chriſtians of the firſt Ages, a great Number of the *Monks* in the *Chartreux* now in *Europe*, the *Banians* among the *Indians* and *Chineſe*, the *Guebres* among the *Perſians*, and of old the *Druids* among ourſelves: And there are whole Villages in this Kingdom, (even of thoſe who live on the Plains) who ſcarce eat *animal* Food, or drink fermented Liquors a dozen times a Year. 'Tis true, moſt of theſe cannot be ſaid to live at Eaſe and *commodiouſly*, and many may be ſaid to live in *Barbarity* and *Ignorance:* All I would infer from this, is, that they do *live*, enjoy *Life*, *Health* and outward *Serenity*, with few or no bodily Diſeaſes, but from Accidents and *epidemical* Cauſes; and that being reduc'd by voluntary or neceſſary *Poverty*, they are not able to manage with Care and Caution the reſt of the *Non-naturals*, which, for perfect Health and Chearfulneſs, muſt all be equally attended to, and prudently conducted; and their *Ignorance* and *Brutality* is owing to the want of the Convenience of due and ſufficient *Culture* and *Education* in their Youth. But the only Concluſion I would draw from theſe *hiſtorical Facts*, is, that a *low Diet*, or living on Vegetables, will not deſtroy *Life* or *Health*, or cauſe nervous and *cephalic Diſtempers*; but, on the contrary, cure them, as far as they are cureable.

cureable. I never once dreamt, nor do I think it natural, reaſonable or practicable, as human Affairs are now conſtituted, that the whole *Maſs* of Mankind ſhould or could live on *Vegetables* only; the Blood and Juices they would beget, might not, perhaps, be rich and *durable* enough for *Labour*, *Force* and *Proweſs*; though I will not abſolutely determin the contrary, conſidering that all theſe are innate and *original* Powers in the Body: But this I pretend to *demonſtrate* from theſe *Facts*, that *Abſtinence* and a *low Diet* is the great *Antidote* and univerſal Remedy of Diſtempers acquir'd by *Exceſs*, Intemperance, and a miſtaken *Regimen* of *high* Meats and Drinks; and that it will greatly alleviate and render tolerable, the original Diſtempers deriv'd from diſeas'd Parents; and that it is abſolutely neceſſary for the *deep-thinking* Part of Mankind, who would preſerve their *Faculties* ſound and intire, ripe and pregnant, to a *green old Age*, and to the laſt Dregs of Life; and that it is the true and real *Antidote* and Preſervative from Wrong-headedneſs, irregular and diſorderly *intellectual* Functions, from Loſs of the *rational* Faculties, *Memory* and *Senſes*, and from all *nervous Diſtempers*, as far as the Ends of Providence and the Condition of Mortality will allow.

12. It is evident to our *Senſes*, that an Over-doſe of *Port*, *Punch*, *Gin*, or *Brandy*, will

will make a Man as *mad* and distracted for a time, as any Person confin'd in *Bedlam* can be: It is equally evident, that a *Surfeit* of strong high Foods will *sink*, *depress* and *disable* a Man as much from all rational Thinking and Action, as habitual *Melancholy* and *Hypochondriasm*. Here are two sensible Causes of the two different kinds of *Madness* and *Lunacy*, or Deprivation of the rational Faculties, at least of their Use for a time. Either of these, continu'd in, will fix and habituat these two Distempers into their habitual Natures. All Distempers are cured by their Contraries; low living and Water-drinking, will not only prevent, but cure these two kinds of Distempers. Excesses in this low, cool living, as to the Quantity taken down, can only produce a little transient Sickness, and Evacuation upwards or downwards; and he who would preserve his Head clear, his Faculties quick, and his Attention fix'd, need only live as *low* and *cool* as he finds his Nature can bear with tolerable Ease, and only recruit when she gives him a *Call*; for he will have many *Calls* before she suffers greatly for Want, unless violent *Passions* be the Cause, which are a third *Species* of *Wrong-headedness*, or *Madness*; but which is seldom carried to an *Extreme*, but where the Habit and the Body is already greatly distemper'd, spoil'd and putrified.

13. I CAN conceive the Matter no otherwiſe than thus: The *Mind* or *Soul* is the *ſelf-moveing, ſelf-active, ſentient* and *intelligent Principle*, with limited, but invariable natural Powers of *Liveing*, and of *Thinking, Free-willing*, and beginning Motion in thoſe Bodies, whoſe *Paſſivity* or *Inertia* is not ſuperior to its *active* Powers. How it exerts theſe Powers on *divinely organiz'd* Matter, I do not here pretend to ſay; but I conceive it acts on the Organs by means of the *Mechaniſm* of the Brain and its *Nerves*, which are an Infinity of differently ſituated, complicated and ſtretch'd little *Filaments* or *Fibrils*, fill'd with a ſoft *milky* cellular Subſtance, (like a *Ruſh* with its *Pith*) contain'd in ſmall *membranous* extremely *elaſtic* Sacks or *Tubuli*, all whoſe *elaſtic* and *energic* Virtue conſiſts in the proper *Tenſion* or *Vibrations* of theſe Sacks or *membranous* Coats, ſpread over all the *Solids* of the Body, which being extremely *elaſtic* and ſpringy, convey *harmonious* and divinely proportion'd *Vibrations, Undulations* and *Tremors*, excited outwardly by Objects to this *ſentient* and *intelligent* Principle; and reciprocally the *Soul*, or ſelf-moveing Principle, impreſſes proper *Vibrations* and *Tremors* on theſe infiniteſimal *membranous Sacculi* to the reſpective *Organs* of Senſe and *Muſcles*; and thus *Senſation, Perception, Images, Ideas* and *muſcular Motion* may be perform'd. When the Juices of the Body are cor-

corrupted, their Particles too big, too ſharp, too corroſive, or any way improper, they may excite *Tremors*, *Vibrations* and *Oſcillations unharmonious*, *heterogeneous* and *diſſonant*, in the Courſe of the *animal Functions:* in Sleep, in Dreams, in Diſeaſes, or in any State of the Body: On theſe unnatural, wild and inconſiſtent *Ideas*, *Senſations* and *Sentiments*, the *ſelf-active* Principle may act very conſiſtently to its Nature, *viz.* reaſon juſtly, chooſe judiciouſly, and operate *conſiſtently*; and yet the *Groupe* and whole *Aggregate* and Connexion of ſuch *Cogitation* and *Ratiocination* may be wild, extravagant and unnatural, and quite wrong-judged, and *out* of *Common Senſe*, and *juſt* and *healthful Thinking* and *Conſiſtency*. This is the beſt *Idea* I can conceive in theſe abſtruſe and obſcure Diſtempers, which I only propoſe as a *Philoſophical Conjecture:* others may explain the Matter better, if they can.

14. On the whole, I think the *lighteſt* and the *leaſt* Food may be juſtly term'd the ſhorteſt and moſt effectual *Antidote*, and the moſt *univerſal Remedy*, for all Diſtempers of the Body, and Errors and Miſtakes of the *Mind*, that depend upon, or have any Relation to, the Body, that the Wit of Man can ſuggeſt or invent.

Chap. III.

Reflections *on the* Nature, Cauſe *and* Theory *of acute, epidemical and contagious* Diſtempers, *in the* Animal *and* Human Creation.

1. UPON all the *Experience* I have ever had, or the *Obſervations* I could ever read or make, I have concluded a *Fever*, or an acute Diſtemper, (genuine or ſymptomatical) is to be denominated *ſo*, or to be called *ſuch*, chiefly from an uncommon, dureable *Quickneſs*, *Fullneſs*, *Hardneſs*, or *Labour*, in the Pulſe, and a Foulneſs of the Mouth or Tongue; and that the *firſt* proceeded from too great a Quantity, *Denſity* or *Tenacity* of the *Blood Globules*; and the *ſecond* from too hot, acrid and *briny* a State of the *Serum*; and that both together made that State of the *Blood* which produc'd *malignant*, putrid and *cacochymic* Fevers, of which there are endleſs, uſeleſs and frivolous Diſtinctions among *Authors*, which can neither be aſcertain'd, when they happen, nor afford juſt and diſtinct *Indications* to proſecute a proper *Cure:* Theſe two mentioned *Diſtinctions* admit all the Degrees of finite Quantities, hold thro' all their various Kinds, (whoſe *Symptoms* ſeem to me rather *Effects* than *Cauſes*) and will account for all the Appearances of *acute* Diſtempers. As to *ſlow*, or,

or, as they are called, *nervous* Fevers, I reckon them only *Symptomatic*, and the Product of an hot ſcorbutic *Cachexy*, ſome *Capillaries*, *Glands*, or ſome noble *Organ*, beginning to be obſtructed, *ſchirrous*, or to ſpoil: And, I think, an *Hectic* is cauſed by tumified or ulcerated *Tubercules* in the Lungs, or from *purulent* Matter concocting ſomewhere, or from ſome of the *Viſcera* corrupting; and all the Kinds of them, from bad Juices *firſt*, and obſtructed *Glands* or *Viſcera after*.

2. If this Account be *juſt*, as it is *ſimple*, the *Indications* for the Cure of the ſeveral kinds of *Fevers* will riſe very naturally and readily; *viz.* in the *firſt* kinds of *Fevers*; 1*ſt*, Evacuations of all proper kinds, eſpecially *Phlebotomy*, till at leaſt the Strength and Velocity of the *Pulſe* ſubſide, and, 2*dly*, cooling, acid and thin *Dilution* plentifully and uniformly thrown in, to ſeparate the *Blood-Globules*, and keep all the *Capillaries* pervious, and prevent their Obſtruction and *Coaleſcence*. In the *ſecond* kind of Fevers, leſs, though ſufficient, *Evacuation*, but more plentiful *Dilution*, of the *mucilaginous* kind, to ſheath the acrid *Salts* of the *Serum*, and then the *Teſtacea*, with the mild *ponderoſe* (*Cinnabar*, native or artificial, and *Antimony Diaphoretic*, *Bezoarticum Minerale*, *&c.*) to break their Points, are here indicated; and in the *compounded* kinds, a *Compoſition* of both

Intentions, and both kinds of Medicines; in the *Symptomatic* Kind, beſides the general *Intention*, a particular Application and *topical* Remedies to the les'd *Viſcera* or *Organ*. Perhaps ſimple and clear *Orange-Tea* or Whey thrown in perpetually, and the cooling *Salts*, with the ſimple *Teſtacea*, even in the blood-globular Fevers, may do beſt; and Barley-water, or thin Water-gruel, with Juice of Lemons, and the mild *ponderoſe* with the *Teſtacea*, may do well in the *ſerous* Kind, if conſtantly, regularly and plentifully thrown in. But Fevers, in general, will be beſt underſtood, in my way of Thinking, from the Nature of their worſt and moſt deleterious Kind, under which I would claſs all the *eruptive* Kinds, as leſſer Degrees of the ſame *Species*.

3. *CONTAGION*, its Nature and Cauſe, have much puzzled and perplex'd ſome *Philoſophers*; and yet, if we take the Matter right, there will no ſuch Difficulty be found in it, as is commonly imagin'd. For ſuppoſing, 1*ſt*, That all Matter is *attractive*, both in its ſmall and great Parts: 2*dly*, That this *Attraction* is according to ſome conſtant and invariable *Law*, as the *ſubduplicate*, *ſubtriplicate*, or ſome other *reciprocal* Proportion of the Diſtance from the Centre of the Particles: 3*dly*, That the leſs a Body is, the greater will be its Degree of *Attraction* in reſpect

reſpect of its Solidity, or the Quantity of Matter it contains: 4*thly*, That *Fire*, *Heat*, *Fermentation*, and all kinds of *inteſtine* Motion, have a natural Tendency and *Energy* only to divide and reſolve Bodies into their ſmalleſt Parts; and conſequently that *chymical* Fires, and all artificial Operations, by which the Particles of Bodies are violently agitated, can have no other Effect than to divide them into leſſer, and ſtill leſſer Parts; which Parts, when once ſeparated and ſet free, either recede and fly off from one another, if without the *Sphere* of each other's *Attraction*; or *coaleſce*, and run into one another's Embraces, and ſo form Bodies of a different *Texture* and *Bulk*. Thus, for Example, the Juice of the *Grape*, when duly fermented, turns *vinous*, that is, by the inteſtine Motion and Heat, ariſing from the Laws of *Gravity* and *Attraction*, the *Tartar* and eſſential *Salt* runs together, and ſticks to the Sides of the Veſſel, the Husks ſwim on the Top, and the Stones and earthy Parts drop to the Bottom, and form the *Lees*, and the *vinous* Part ſwims in the Middle, according to its Purity, or relative Levity. A *ſecond Fermentation* on the ſame Body by the ſame Laws and *Mechaniſm*, renders that *acetous* which was before *vinous*; the *ſulphurous* or inflammable *Spirit* evaporating, and the *eſſential Salts* remaining diſſolving and mixing with the Lymph, makes it *acetous*: Theſe divided by a ſtill greater and

more violent Heat, as in an *Alembic*, ſeparats the Parts more minutely, and minutely throwing off the lighteſt firſt, and the others in Proportion to their *Gravity* and *Volatility*; and when artificially treated, afford the *Spirit*, the *Oil*, and the *Salt*, apart. *5thly*, There are properly but three kinds of *Salts*, though never any of them is to be obtained pure, *viz.* the *Acid*, the *Alkali*, and the Urinous or Volatil *Salt*. The *Acid* ſeems to be angular, with *plain* Surfaces; hence its Sharpneſs, and greater *Attraction*. The *Alkali* ſeems to be porous and obtuſe, or *calcarious*, as hard *Sponges*; and hence its *Fermentation* with Acids. The *third* ſeems to be porous and obtuſe, but intimately united with a light volatil *Oil* or *Sulphur*; and hence its *Volatility* and *Detonation*. And theſe are the *Salts* that all *animal* Subſtances, and moſt *Vegetables* yield, when *chymically* prepar'd, or much divided and ſublim'd by *Putrefaction*, *Fermentation*, or *Diſtillation*. *6thly*, Theſe *Salts* are diviſible or *ſubtiliſible in infinitum*, and are mix'd with one another in all Proportions, and with more or leſs *Sulphur*, *Oil*, or inflammable *Spirit*, which renders them capable of infinit *Volatility* and *Sublimity*, and ſo of *infinit* Force or Activity; and it is to theſe that Contagion and *peſtilential* Diſtempers ſeem to owe their *Malignity*, *Univerſality*, and *deleterious* Nature.

4. A

4. A *PESTILENCE*, or Plague, arises mostly from one of these Causes: 1*st*, Dead Carcases of Men, Horses, or Cattle slain, and *putrifying* above Ground by Heat and Moisture, and throwing their noxious Particles, and infinitely small *volatile urinous Salts*, through the *Atmosphere*. 2*dly*, Dead Fishes thrown out of the *Sea*, and putrifying on the Shore; or Clouds and Swarms of dead *Insects* bred in Fens, and hot marshy Countries, as *Caterpillers*, *&c.* drowned in the Ocean, and thrown ashore by the *Tide* in scorching *Climats*, to putrify and ferment by Heat and Moisture, and send forth an *Atmosphere* of active *urinous Salts*. 3*dly*, *Cloaths*, *Rags*, *animal* or *vegetable* Substances, taken from Persons dying of a *Plague*, and saturated with such infectious or deleterious Particles which stream from them. 4*thly*, Bad Food, *i. e.* putrified, rotten, and too minutely divided Flesh, abounding with detach'd *urinous* and *volatile Salts*; as the *Hydrophobia* in *Dogs* and other *Animals*, is probably from Surfeits of putrified *Carrion*, or by the *Infection* being communicated by the *Bites* of such. Or, 5*thly*, From *mineral*, *arsenic* and poisonous Damps, Vapours, Exhalations arising from *Volcanoes*, *Grottoes*, *Ruptures*, or *Mines*, excited by subterrancous Heat and *Fermentation*. Upon exact Search and Inquiry, one of these *five* Causes will constantly be found to

have been the natural Source of all the *Plagues*, or *peſtilential* Diſtempers, that have ever been in the World. They can only ariſe from an high *Exaltation*, *Volatiliſation* and *Sublimation* of theſe urinous *animal Salts*, and *mineral Steams*, which being hard, porous and *alkaline*, but fitted with a light, *cauſtic* and *æthereal Oil*, or *Sulphur*, whereby their *Velocity* and *Elaſticity* is increas'd, they become *ſmall*, *volatil*, and highly *attractive*, by their *acid Sulphur*, when taken into animal Bodies in great Quantities, by the *Lungs*, or *Vaſa Inhalantia*: They ſoon by their Effervescence (like *Barm* in *Wort*) rend, tear and putrify the *Solids*, and break the Coheſion of the Fluids, and ſo deſtroy *animal Life*; and they ſooner enter into, and make quicker *Havock* on, ſuch as live high, as thoſe of this Iſland do, than thoſe of any other Nation whatſoever, (as *Davila* obſerves in his Hiſtory of the Civil Wars of *France*) like the *Hogs*, which of all other *Animals* catch ſuch Diſtempers the ſooneſt, and propagate it the quickeſt. This has been particularly obſerv'd in *Aſia* and *Conſtantinople* by Dr. *Ottoni* *.

5. Both kinds of *Salts*, or deleterious Particles, when collected into great Volumes, and united into large Cluſters, ſuddenly and violently deſtroy the *animal Machin*, *viz.* the

* *Vide* Philoſophical Tranſactions.

volatil

volatil refin'd *Acid*, and the volatil *Alkali*; the first constitutes *Poisons*, and the latter *Plagues*. *Acids* must always consist of sharp, angular, and hard Particles, as is evident from their Effects on *Metals*, and animal *Organs*; and since they must have a Figure, that of a *triangular equilateral Prism* seems most suitable to their Nature; and such *Poisons* manifestly appear to be, from Experiment, as in the Action of *Aqua Fortis*, *Aqua Regia*, or *Spirit* of Vinegar on *Metals*; and when admitted into the *animal* Habit, immediately fix and coagulate the Juices, and violently rend and tear the Solids.

6. *MADNESS* and *Hydrophobia* in Dogs, and Rage and Lust in other *Animals*, arise from the Abounding and Fermentation of *animal* Salts only; particularly the Madness of *Dogs* is observ'd to proceed from *Surfeits* of Carrion and putrified Flesh, they filling their Blood and Juices with such *volatil* and animal *Salts*, that are detach'd, and in a State of Activity; which *Hydrophobia* is now so successfully, and, I think, rationally cured by ponderous Medicines, those especially that are the quickest of all in their Operations, as large Doses of *Turbith*, as might have been justly expected*; but the Cure cannot be

* *Vide* Philosophical Transactions for 1737. Dr. *Desault's* Book.

certain, unleſs it be brought to riſe to a quick *Salivation*; for as the Effect of this *Poiſon* is quick, ſo muſt that be of its *Antidotes*. *Mercurial* Inunction, with a Quickſilver Ointment, and the active *Ponderoſe*, may haſten and aſcertain the *Cure* in ſuch a deſperate and frightful Diſtemper.

7. ALL *epideimcal*, infectious and eruptive Diſtempers, are but leſſer Degrees of *peſtilential* ones, cauſed by theſe *animal Salts* weaken'd and diluted. The *Itch* ariſes from the ſame *animal* Salts, of a more courſe, dull and leſs deleterious Nature, encourag'd by Naſtineſs, as *Vermin* are bred in cloſe damp Rooms. The *Small-pox* is the firſt Elements, or the loweſt Degree of the *Plague* and *Peſtilence*; and the *Great-pox* is the ſame, more condens'd and concentred: And thus, by an eaſy and natural Piece of *Philoſophy*, all *epidemical* Infections, and *peſtilential* Diſtempers, may be accounted for.

8. *ACUTE* Diſeaſes are generally produc'd more immediately by Exceſſes in ſtrong, fermented, or *ſpirituous* Liquors. *Spirits* and *volatil* Oils have the moſt ſudden, the moſt active and deleterious Quality. *Gluttony* may create Obſtructions in the *Glands* and *Capillaries*, and ſo produce *chronical* Diſeaſes; but it is by *Drunkenneſs* alone, and dealing too freely with Fire and *Spirits*, that quick and

and violent Devaſtations are made. I am never under any Apprehenſion for thoſe who drink nothing but Water, (the only Beverage fitted and perfected by the *Author of Nature* for *animal* Bodies) let their Complaints and Diſeaſes be called by whatſoever Name they will; there is no poſſible Caſe in an *animal* Machin, but that one, *viz.* where Nature is endeavouring to throw the peccant Humours on the fartheſt Diſtance from the *Centre* and *Bowels*, and on the Extremities, that Water-drinking is not ſafe and proper; and in Perſons habituated only to Water, very gentle and mild *Cordials* will ſerve, to wind up the internal Springs of the Circulation, and help them to propel the morbid Matter to the greateſt Diſtance; and then, and only then, when there is an *Anxietas Præcordiorum*, an internal Diſorder on the *Springs* and motive Powers, a Sickneſs, *Nauſea* and *Retching*, and even then only, when the Diſeaſe is too ſtrong for Nature's weak Powers, is ſhe to be fortified with *Cordials*; and they ought to be the moſt ſimple and temperat, (eſpecially to Perſons generally ſober) even in the retir'd *Gout*, *Small pox*, *Eryſipelas*, or any flitting or changeable Diſtemper; and it is only in the *Intervals* of ſuch Diſtempers, that Water-drinking is adviſeable. *Spirituous* and *fermented* Liquors are only proper, on internal Sickneſs, *Anxieties*, *Inappetency*, and Lowneſs; or in Extremities, as a *Spur* or *Filip*, to

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give Nature a little Reſpite when oppreſs'd, and enable her to go on with the *extirpative* and *preventive* Remedies mentioned. And even in *acute* Caſes, if we believe the well-atteſted Reports of the *Ice-water Doctors* of *Naples* and *Rome*, it is ſurpriſing, in ſuch Caſes, what Cures they have perform'd, by pouring down plentiful Draughts of *Ice-water*, or *diſtill'd Rain-water* cool'd with Ice. Barley-water, with Syrup of Currants or Lemons, or *Orange-whey* or Tea, might perhaps do the like here. I think, after proper Evacuations, proper Dilution is the univerſal Remedy in *acute* Caſes.

9. I SAY, I think timeous, well-judg'd and plentiful Evacuations of all kinds, with full, free and grateful Dilution, the great Affair in *Acute* Caſes; *animal Salts* highly exalted, refin'd and ſublim'd, (that is, divided) are the *Leaven* and *Yeſt* towards *Putrefaction*, as any one the leaſt acquainted with *Philoſophy* muſt know, which is the true natural Cauſe of the *Plague*, and all putrid and malignant *Fevers*: And as *Acids* only ſtop *Fermentation*, *Æthiops*, as made of the beſt Acid, and the moſt effectual *Deobſtruent*, bids faireſt for Prevention, as acid Dilution, after proper Evacuation, ſeems the beſt Method of *Cure*; juſt as in great Conflagrations, the Buſineſs is to withdraw and diſperſe the Fewel as faſt as we can, and pour on Water till the Flames have

have not Force to consume the Dwelling; when the Danger is over, there will be Time and Leisure given to set in Order, and make it convenient and habitable again. It is not my Affair here to detail and limit the *specific* Means; they may be met with in *Lominus*'s *Eloganty*, and in *Sydenham* solidly laid down; and with a good deal of specious Probability in *Langrish*'s *Theory of Physic*, and precisely pointed and adjusted by the most ingenious Dr. *Bryan Robinson*, in his excellent *Animal Oeconomy* towards the Close. All Acute Distempers are lower Degrees of, and have some *analogous* Resemblance to, *contagious* and *epidemical* Distempers. Latest Accounts from *Constantinople*, and all over *Asia*, inform us, that the most effectual Security *Europeans* and *Francs* have in a *Pestilence*, is to withdraw into a sound pure Air, and live very temperatly, and, on the Necessity of a nearer Approach, to live on *Vegetables* only.

10. SINCE all kinds of *Fevers* are but *Miniatures* and Steps towards a *Plague*, which is the highest Degree, and quickest *Dissolvent* of the *animal* Frame, *quod potest majus, potest minus*; plentiful and proper Evacuations at first, acid and cooling *Dilutions*, with interspers'd *Diaphoretics*, as the Constitution of the Patient, and the Malignity of the Disease, require and call for, seem to be the most solid Indications in the *Pestilence*, and

and in all *putrid* and *malignant Fevers*; eſpecially that of the confluent *Small-pox*, in its firſt Stage; ſuch as a roaſted *Orange* with *Bawm*, *Sage*, or *Green-Tea*, and ſweetened with *Currant-gelly*, *Barley-water* with Spirit of Nitre, ſmall Sack-whey made with Juice of Lemons, or the like. On the ſecond Fever of the *Small-pox*, and after Maturation in all *eruptive* Diſeaſes, gentle *Diaphoretics*, and mild *Cordials*, are indicated, to keep out the morbid Matter on the Surface. And the beſt *Antidote* in Nature againſt the Small-pox, and the Plague itſelf, is certainly *Æthiops Mineral* and *Cinnabar* of *Antimony* in *Pills* or *Bolus*, taken twice or three times a Day, and waſh'd down with Orange-whey, as thoſe who underſtand the Nature and Efficacy of theſe Medicines muſt ſee, and of which I have had ſome ſucceſsful Experience; for the confluent *Small-pox* is but a Miniature of the *Plague*, and both are cureable in good Habits. And I am ſatisfy'd the *Hydrophobia* itſelf can only be ſolidly cured by *Mercury* judiciouſly managed.

II. I HAVE often wonder'd how the antient *Greek Phyſicians*, eſpecially thoſe about the Time of *Hippocrates*, ſo ſucceſsfully, and with ſuch wonderful *Eulogies*, from all *Antiquity*, cured their *Patients*, when it is certain the *Materia Medica* was then very narrow and ſimple, and thoſe Medicines mentioned

tioned and deſcribed by them were of the rougheſt and moſt active Kind, ſuch as *Hellebor*, *Coloquintida*, *Elaterium*, and the like, and their Number very ſmall. All I can imagine to account for this, is, that *Diet*, or rather abſolute *Faſting*, (as was certainly the Practice of *Aſclepiades*) much *Dilution*, and eſpecially plentiful Water-drinking in acute Caſes, was their great Affair: but their *Climat* and Diſeaſes were quite different from ours. This Method tho' has lately been renewed with unaccountable and almoſt miraculous Succeſs in *Snow* or *Ice-water* at *Naples*, as may be ſeen by the Account of it in the *Philoſophical Tranſactions*. I have well-atteſted Relations, and by the moſt ſober and intelligent Perſons, (*Phyſicians* and others) of the wonderful Effects of it in almoſt all Caſes with a quick Pulſe; in ſome particularly, by pouring down every Hour, or every half Hour, a Pint or half a Pint of this Water, cold or hot, according to the Seaſon, and ſometimes acuated, when ſluggiſh, with *Spirit* of *Nitre* or Currant-jelly; and continued even to 35 Days, without any earthly Food; and even in a *nervous Fever*, and a beginning *Phthiſis*: by which the Patients were perfectly recovered from all *feveriſh* and *nervous* Complaints, and by living at firſt on *Aſſes* Milk and light Soups, and ſo returning gradually to a common *Diet*, have continued well and healthy ever ſince. Many more and very different Caſes of the

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ſame Nature, (with a quick Pulſe) and ſome *Chronical* ones, have been ſent me well atteſted; but this firſt one I pick'd out as a general *Model* and *Specimen:* I cannot think, indeed, this Method imitable in our colder *Climat*; but this I am very certain of, that if the *animal* Body be nothing but a *Compages* or Fabric of *Pipes*, as it moſt certainly is, then plentiful *Dilution*, by injecting the thinneſt, moſt fluid, and moiſtening of all *Liquids*, is the readieſt way to cleanſe and make them *pervious*; and the only thing that can preſerve them open, if they are not clogg'd and obſtructed with too groſs and improper Food in the Time; for in *Acute Caſes*, there is little or no Digeſtion, and there moſt certainly is a moſt univerſal *Obſtruction* of all the *Glands* or *Capillaries:* For let *Phyſicians* diſpute to the End of the World, about the Cauſe of *Fevers*, I think there can be but theſe *two*, an acrid, hot and *viſcid* Blood and Juices, and an univerſal *Obſtruction* of the *Lymphatics*, *Capillaries* or *Glands*, as theſe putrified Juices happen to fall on particular *Organs* or Bowels; and conſequently there can be no other proper and adequat *Cure* of them, but *proper Evacuation* in all the probable and poſſible Ways, and plentiful *Dilution* by the lighteſt, cooleſt, and moſt penetrating *Fluids*, together with *grinding* Medicines; all other Methods ſeem to me abſurd and frivolous. But it muſt depend on the *Judgment* and *Experience* of

of the *Ordinary*, to apply these general Methods to particular Cases, and particular Patients; for *Climats*, *Seasons*, and different Airs, have the greatest Influence on *Acute* Cases, and no one Method of Cure can be universal to all Countries and Constitutions, and Acute Cases require Attention to the minutest Circumstances.

Chap. IV.

Of the Blood.

§. 1. THE *Blood* is the Source and occasional Cause of *Animal Life*: In the *Blood is the Life thereof*, say *Moses*; and, I think, so says the best *natural Philosophy*; and according as it is good, bad, or indifferent, so is the Health of the *Animal*. When I find the *Blood* like *Lambs Blood*, that is, when the *Serum* is about One-half, or One-fourth, of the Whole, near limpid, or of a pale *yellow* Colour, not over *saltish*, nor too sweet, the *Curd* florid, without *Size* or *Buff* on the Top, and readily yielding to the Knife, or dividing *Instrument*; I conclude my Patient in no immediate Danger, let his *Symptoms*, or his Distemper, be called how it will; not but that such a Person may have sometimes grievous Ails, to wit, from topical Injuries, a loaded or relaxed Stomach, or Solids,

Solids, obſtructed *meſeraic Glands*, or from the Blood and Juices not being as yet perfectly ſweeten'd and thinn'd in the *capillary* Veſſels (but there forming Obſtructions); from preternatural Formations, or *epidemical* and accidental Injuries: But while the Caſe is as I have juſt now deſcribed it, I am confident the Patient is under no preſent mortal Diſtemper, and in Time, by proper Means, may get over theſe *Symptoms*, and well again, if he is not too far gone in Life.

§. 2. THE Blood appears by the *Microſcope*, like Water with mix'd ſoft Fleſh *Globules*, which by Dr. *Jurin*'s * accurate Experiments, are about Three-fourths of the Weight of the whole Maſs, and in *Diameter* about $\frac{1}{124}$ of the *Diameter* of an ordinary Hair of the Head. By a *Chymical Analyſis*, he found a great Proportion of *Phlegm* or pure Water in the *Serum*, and but little *Salt*, *Oil* and *Earth*; but that the *Curd* had much leſs *Phlegm*, and a great deal more of theſe others: But I have little Faith in the Principles of any natural Bodies forced out by the *Tortures* of Fire in *Chymiſtry*, at leaſt for the Purpoſe of Medicine, that *Analyſis* quite altering the Texture, Figure and Properties of the integral Particles of natural Bodies; nor have I ever, in my Practice and Obſervation, found a *Chymical* Medicine of

* *Vide* Philoſophical Tranſactions.

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any Value or Efficacy in the Cure of *Chronical* Diſtempers, which I could not ſupply better by *unanalys'd* natural Bodies, and their integral Particles, in Water, prepared only by common *Cookery*; beſides the Damage theſe Chymical Medicines, when introduced into the Habit, do, in the ſmall Veſſels, if continued long, or given in any great Quantity.

§. 3. The *Foulneſs*, *Acrimony* and *Size* of the Blood, I take chiefly to ariſe from ſtrong fermented Liquors, in which the Oil, Spirit, and Salt, is ſet free by Digeſtion, and then ſuperabounds. Nature has created for us animal and vegetable Foods, but no fermented Liquors: they are the Product of *infernal* Art. I have by frequent little *Phlebotomies*, aqueous Beverage, a low Diet, and the mild *Ponderoſe*, obſerved the *Buff* on the Blood grow thinner, its Colour livelier and whiter, the *Serum* more tranſparent and ſweeter, and the *Symptoms* of the Diſtemper milder and leſs frequent, by ſenſible Degrees; and no doubt they all come on in the ſame Order and Degrees, by the quite contrary Methods to which they go off. Strong *fermented* Liquors contract and bind together the *Blood Globules*, and ſtuff them with their *Oils* and *Spirits*, ſo that they become lighter, and ſwim on the Top of the ſeparating Maſs, fill the *Serum* with their Salts, and weaken and break the Coheſion and Elaſticity of the *So-*

lids, by their too ſtrong *Stimulus*, ſo that they are not ſufficient to circulate and mix in due Proportion the ſeveral Principles, and continue the Maſs of Blood, ſo as it ought to be, in a ſound State of Health; and hence Obſtructions, Diſtempers, and Death.

§. 4. THE whole Buſineſs of a *Phyſician*, in Chronical Diſtempers at leaſt, is to render the Blood (and conſequently all the other *Secretions* ſeparated from it) ſufficiently fluid, ſweet and balſamic; this alone can reſtore to the Patient perfect and dureable Health, and nothing leſs ever can. Many a Perſon is born with this bad Blood from diſeaſed Parents, and in ſome I have ſeen it ſenſibly, (without catching Cold, as is the common Cant,) even when very young, to my great Surprize; but always found the Parents had been unhealthy, when they were born, or had died early of ſome *Chronical* Diſtemper, or the Children were begot when the Parents were old, and conſequently the Blood running into *Viſcidity* and *Size*. It is true, a deep Cold will bring on a tranſient and acute Viſcidity, which may be ſoon remov'd by ſoft and *Diaphoretic* Medicines; but the true *chronical* and dureable *Size*, can only come from the *Salts*, *Spirits* and *Oils* of fermented Liquors, compreſſing and breaking the *Blood-Globules:* If this has not come to ſuch a Degree, as actually to kill the *Seminal Animalcula* in the Parents, it may tho' thus make the Blood ſo *viſcous*, as to pro-

produce *Fits*, or other mortal Diſtempers in the Infant, or ſome Acute or Chronical Diſtempers in its more advanced Age, eſpecially when the Party has come to its full Growth, the Solids are developed and fix'd for ſome time in their Extenſion; which may happen at any Time, but chiefly about Thirty-five, or towards the *Meridian* of the now common Length of Life. For though a Perſon is born with ſuch a corrupt and ſizy Blood from his Parents, yet while the Solids and Veſſels are developing, unſtretched and extending, this *Size* and *Craſſity* may not appear to the Senſes, even on Blood-letting, till about or towards the Time mentioned, becauſe from the Fibres and Coats of the Veſſels ſtretching and yielding, the Globules are not ſo compreſſed, as to be broken and disfigured, which is neceſſary towards the Production of this *Size*. The Globules may be approaching, but not come into actual Contact and Compreſſion. I never ſaw a deep obſtinate *Chronical* Diſtemper, without *ſizy* Blood, at leaſt in its laſt Stage, nor do I think it poſſible.

§. 5. The Inſtances mentioned by Dr. *Lower*, of the Broath flowing from the Noſe, after a long *Hemorrhage*, and of pure white Blood, by Dr. *Beal*, and ſuch-like Caſes, are only from the extreme Viſcidity of the *Craſſamentum* or *Grume*, which hinder the *Aſſimilation* or intimate Mixture of the

new *Chyle* with the old Maſs, and make them ſeparat like Oil and Water; which is likewiſe the Caſe in confirm'd *Dropſies*, *Diabetes's* and *Jaundices*; in which laſt Diſtemper, upon opening a Vein on ſome threatening *Symptoms*, I have ſeen the *Curd* coated on the Top with a yellow *Buff*, and the *Serum* like a foul Tincture of *Saffron*; and no *Cure* is to be hoped for in ſuch *Cachexies* from Evacuations only of any kind. *Cathartics*, *Diuretics*, *Diaphoretics*, or *Emetics*, are nothing but mere temporary Reliefs, (of all which *Emetics* procure the longeſt and greateſt) nothing but a thin deobſtruent Regimen of the ſofteſt and cooleſt Nature, which will readieſt unite with the old *viſcid* Maſs, with the mild grinding *Ponderoſe*, ſuch as *Cinnabar natural* and *artificial*, *Antimony*, *Diaphoretic*, *Millipedæ*, prepared *Egg-ſhell*, or *Crab's-eyes*, and the like, long continued, with a proper *Regimen*, can extirpate ſo ſtrong a *Cachexy*.

§. 6. THE *ſcarlet* Colour of the Blood is undoubtedly owing to the *Air* and its *Nitre* in the *Lungs*; there are Properties in the Air which all our modern *Philoſophy*, or moſt accurate Experiments, have not as yet diſcovered or accounted for. *Thoſe* of the promoting and actuating *Light* and *Fire*, and giving the *ſcarlet Colour* to the Blood in the *Lungs*, are ſome of the moſt unconteſtable and conſiderable. I have conſtantly obſerved, that

that thoſe who had weak, bad or tender Lungs, thoſe who were much ſubject to *Coughs*, *Cold-catching*, to be *Aſthmatic* or *Catarrhous*, have always had bad Blood: Nor is it poſſible it ſhould be otherwiſe; the *venal* Blood is of a ſenſibly paler and fainter *Red*, than the *arterial*; and ſtrong *Lungs* and a good *Air*, contribute much to the grinding, mending and giving the *ſcarlet* Colour to the Blood *. The *Air* in the *Bronchial* Veſicles (which, when blown up fully, riſe almoſt perpendicularly on the Branches of this *pneumatical Machin*) both ſuffers the Blood to paſs freely through the Lungs, and, by their *elaſtic* Veſicles blown up with elaſtic Air, ſeparat the compreſs'd venal *Blood Globules*, and by its introduced *Nitre*, divides them from their too cloſe Union, breaks them into their elementary leſſer Globules, and ſo brings them to that *Minuteneſs*, which is neceſſary to reflect only the *ſcarlet* Colour or red Rays.

§. 7. The *Heat* of the Blood certainly ariſes from the *Velocity* of its Circulation, and the mutual Friction of the Globules on one another, and on the Sides of the containing Veſſels, which will be increaſed as it is more or leſs ſtored with ſharp Salts, hot Oils, or any ſuch active ſtimulating *Particles*. The *Author* of Nature has adjuſted a due *Medium*,

* *Vide* Leuvenhoeck.

between the too flat and low *Craſe* of the Blood, and that of the too pungent and active Nature, which is in Proportion to the Strength of the Solids, and their elaſtic Power; in which the moſt perfect Health conſiſts: All *over* or *under* this *Mediocrity* is worſe, though that *under* is much ſafer for long Life, and that *above* for greater Strength. The Study of a *Philoſopher* or *Phyſician*, in regard to the Body, is to preſerve this juſt *Balance* between the Blood, and Juices, and the Solids; for it is from the Juices ſolely that all the *Solids* are repair'd and increas'd; and *Medicines* can do little or nothing but on theſe Juices: The *Solids*, by their malignant Nature, may be broken, putrify'd or relax'd; but can ſcarce ever be much carried into a higher Perfection, more benign Temper, or ſtronger Elaſticity, even when the Juices are mended by Diet, than they are conſtituted by Nature; ſo that removing Impediments from them, and bringing them to their own original *Tone*, is all that can be done; and even that is only by the Intermediation of ſound Juices: So that if any *Experiments* could be contriv'd to determin the original *Firmneſs*, *Force* and *Elaſticity* of the *Solids*, a *Regimen* might be readily found, that ſhould thin and dilute the *Craſe* of the Juices to be in a true Balance to them, or a little under it, which would be the ſame with the *Panacea*.

Chap. V.

Of Mercury, *its* Nature, *ſenſible* Qualities, *and* Effects.

§. 8. *MERCURY* judiciouſly manag'd, ſeems to me, to be the only true *Panacea*, and univerſal *Antidote*, ſought by *wiſe*, and boaſted of by *pyrotechnical Enthuſiaſts*. *Mercury* ſeems pointed out and impreſs'd by the *Signature* of the *God* of Nature, for the *Cure*, at leaſt for the *Relief*, of intelligent Creatures, made miſerable by *hereditary* Diſeaſes, by natural Appetites irregularly indulg'd, by Ignorance, bad Example and Frailty, in the human Kind eſpecially made ſo by *high* Food, and *ſpirituous* Liquors moſtly. I will not run into the ſubtle and too refin'd Qualities of this only *ſecondary* and true ſenſible Fluid in all Nature, (which, though entertaining to *Philoſophers*, would be of little Uſe in the *Practice* of Phyſic; our Senſes and Senſations being ſo obtuſe, as to be little hurt by *Indiviſibles* or *Minuteneſſes*) but take thoſe that are manifeſt and inconteſtable, which are, 1°. Its *Gravity*, which is at leaſt *fourteen* Times more than that of the other ſenſible Fluid in Nature, *viz. Water*: from whence flows its *Momentum* and Force, in opening a Way to itſelf in all *Animal Tubes*, where the Reſiſtance is leſs than

its Force, or where the Aperture is naturally to be effected. 2°. The *Rotundity* of its component *Particles*, which in all Probability holds to its very *laſt* and *leaſt Particles*; for to the *laſt* inviſible Particle (when compreſs'd on a ſmooth poliſh'd Glaſs) it continues ſtill *globular*; and the leſs the Particle is, the more perfect the *Spheres*, ſo that its very *leaſt Particles* muſt on that Account be perfect *Spherules*, as is evident by fine *Microſcopes*. 3°. The Smoothneſs and conſequent Softneſs of theſe Particles on ſenſible *Animal* Subſtances, they having no *Points* to tear *Animal Fibres* and *Tubes*, and by their *Globoſity* touching them in a Point only; and this is evident from its great *reflective* Virtue, every the leaſt *Globule* being a perfect *Speculum*. 4°. Its readily anſwering, by this extreme Smallneſs of its Parts, the leaſt Impulſe; for on the leaſt Compreſſure between ſmooth poliſh'd Glaſſes, it readily flies into perfect *Spherules*, *innumerable* and *inviſible*, even to the fineſt Glaſſes; ſo that the leaſt Heat or Action puts it into Motion, as is evident from its Aſcent in Glaſs *Tubes*, or in an *Alembic*, not ſo readily indeed as Water or Air, (for that were ſuppoſing it to act contrary to the univerſal Law of *Gravity*) but by reaſon of this Smallneſs of its Particles, and its greater Degree of *Attraction*, more readily in Proportion to its Denſity and Gravity than any other Fluid. 5°. Its greater Degree of *attractive* Force and Ad-

Adhesion to some Bodies or Particles of Matter more than to others, as to *Gold*, and *Salts* of all kinds; which probably may arise from the Smallness of their *Pores*, which can only receive and retain so small *Particles* as those of *Mercury* probably are. These are sensible, known and acknowledged Properties peculiar to *Mercury*, from whence all its great and salutary Effects on Animal Bodies may be readily explain'd and render'd intelligible, without running into Fineneſſes and Subtilties, and these salutary Effects are indeed great and many.

§. 9. The great *Art* required to make *Mercury* the most useful, salutary and beneficial possible, in the several Cases propos'd, is, 1°. To divide it into the smallest Particles possible, and then to unite it with some other *Medium*, which may keep these Particles separated, and at a Distance from one another, so as not to be readily united again into larger *Globules* or Clusters, by which means it may be more easily introduc'd into the smallest *Fibres*, and capillary *Tubes*, by the Force and Course of the *Circulation*, to render them pervious, dissolve their obstructing Slime, and carry it out of the Habit by the Common Shore (the *Guts*) or the Emunctory, Urinary or Perspirative Drains, which Qualities make the proper and peculiar Excellency of *Mercury* above all other Medicines.

dicines. When it is given *crude* and in Subſtance, or in its groſſer Preparations, *i. e.* without Chymical Fire; beyond all Doubt (as we ſee daily by its ſenſible Effects, and ſometimes by its viſible Appearance in Subſtance on the Surface of the Skin) ſome of its ſmalleſt Parts, by their Mobility, *attractive* Force to one another, and ready Aſcent, paſs through the whole *Habit*, not only in the Courſe of the *Circulation*, but even through the Sides of the Tubes themſelves, through the *Membranes* and *parenchymatous* Subſtances: But then this Effect is not ſo ſoon, ſo readily and effectually produc'd in the crude Subſtance, as in ſome of its Preparations, where it is minutely divided, and its Particles kept ſeparated and at a Diſtance from one another, to enter ſingly the ſmall Tubes. 2°. To endeavour to make the *Medium* of the Diviſion, this Cover and Shell of the Particles, and the Matter they are united with, as *ſalutary* and conducive to the *Intention* of the *Cure* as poſſible; or to mix the Particles of the *Mercury* with ſome *vegetable* or *mineral* Subſtance, that has been found by Experience *ſpecific* in the Diſtemper given. This will be more plain, in running through ſome of the moſt common Preparations of *Mercury*.

§. 10. THERE is ſcarce a Body or kind of Matter with which *Quickſilver*, with Labour and Art, may not be incorporated or intimately

mately mixt. It may be united either with *Salts* by *Chymical* Fires, as in *Sublimat*, *Precipitat*, *Calomel*, and the like; but as the *Salts*, when thus divided, have a ſtrong *Stimulus*, are extremely active, and ſo neceſſarily produce very violent Pains and Evacuations of all kinds, *qua data Porta*, I think they are extremely dangerous in delicate Conſtitutions, and tender Bowels; eſpecially if they muſt be long continued, to alter the whole Maſs, and perform the Cure of a great and ſtubborn Diſtemper: All of this kind I call Mercurials *cum Stimulo*. 2°. Or with *Sulphur*, *Antimony*, Sugar-candy, Turpentine, Crabs-eyes, and the like; eſpecially ſuch Bodies as are harmleſs, and not violently active Medicines, and are not ſo ready to run the Patient into great *Evacuations*, and conſequently more proper for tender Bowels, and weak Conſtitutions, when deſign'd as *Alteratives*. *Sulphur* in *Æthiops* indeed will gripe and purge there, but this is readily prevented, by joining equal Quantities of *Crabs-eyes*, *Crocus Martis*, *Aſtringens* or proper *teſtaceous* Powders, which by their abſorbent Quality will make this an admirable, eaſy and ſafe Medicine, I think, above all others, if long continued, as I have often found with great Pleaſure. *Cinnabar* native, but eſpecially recent, and much levigated, and *factitious* alſo, is as ſafe and eaſy as Sugar, but muſt be long continued to produce any ſenſible Benefit, being weak,

though

though of all the Preparations it is the moſt proper, and will at laſt have the ſafeſt and beſt Effect on very ſlender Habits, becauſe tender Conſtitutions are more eaſily alter'd. The *Alcaliſatus*, by the ſtrong *Friction* required to unite the *Mercury* with the *Crabs-eyes*, divides it the moſt minutely; and by the natural Poroſity of the *Crabs-eyes*, there are prepar'd *Celluls* to ſeparate and retain them aſunder, whereby it would be the moſt ſafe active Preparation hitherto, I think, found out; but that, like *Calomel*, from its infinite Diviſion, and the Smallneſs of the Particles, it is apt to *ſalivate*, if given in any Quantity without interſpers'd *Cathartics:* But every Preparation of *Mercury* hitherto in Uſe will do the ſame, except *Cinnabar*, and therefore muſt be watch'd. But, I think, the moſt effectual way of adminiſtring *Mercury* to a given Diſtemper, is to unite and combine it (by Pounding, Rubbing, or with Fire) with that ſpecific Medicine, that has been found moſt effectual in that *Diſeaſe:* Thus, for Example, in the *Scurvy*, *Gout*, *Eryſipelas* and cutaneous *Defedations*, plain *Quickſilver*, *Æthiops*, or *Alcaliſatus* well rubb'd into *Gum Guaiac*, and join'd to an *Aloetic*, will be found the moſt effectual Remedy: In *Hyſterics*, theſe join'd to *Gum* Pills, with an Aloetic, or Extract of the *Bark*, or of wild *Valerian* with *Millepedæ*, theſe, I ſay, in ſuch a Caſe will do great Matters: In *Obſtructions* of

of the *Menſes*, *Æthiops* with *Steel*, does excellently: In Intermittents, *Mercury* with *Bark* and *Steel*, either in Subſtance, in an Electuary: Or in Pills, as with the Extract of the Bark and Salt of Steel: In an Inflammation of the Eyes, *Æthiops* with *Millepedæ* and the *lenitive* Electuary, or the *Electuarium Diacaſſiæ cum Manna*, join'd with *Milk* of *Sulphur*; and the ſame in the Piles, or Hæmorrhoidal Inflammations and Tumours: In the *Eryſipelas*, and every other Inflammation, and in Diſorders of the Stomach and Bowels, *Æthiops*, or *Alcaliſatus*, with Rhubarb in Pills, or in an Electuary: In a *Rheumatiſm*, *Æthiops* or *Alcaliſatus* with *Gum Guaiac* in large Doſes: In the *Sciatica*, *Æthiops* or *Alcaliſatus* with boil'd *Turpentin*: In the *Jaundice*, *Æthiops* or *Alcaliſatus*, with *Venice Soap*, or the *Sapo Philoſophorum*, and with Lime or calcin'd Egg-ſhells: In an *Anaſarca* or even beginning *Aſcites*, *Æthiops* or *Alcaliſatus*, with *Reſina Jalapii*; and ſo in other *chronical* Diſtempers. All I intend here, is, that ſuppoſing the Preparations of *Mercury* do attenuat the Juices, and open Obſtructions the moſt readily and effectually of any thing known, that then another Medicine or Medicines may be joined to it, that is known or acknowledged to be moſt effectual in the Diſeaſe given. I neither ſet down Forms, nor determine Concomitants; that muſt always be under the Direction of the

the *Phyſician* in Ordinary, without whom no one in their Senſes ought to venture on *Mercury*, either Simple or any-how prepar'd; for it is either a *divine Antidote*, or may become dangerous by a wrong Manner of uſing it, without due Regard to the *Caſe*, and the *Patient*, as well as the Form. But judiciouſly and properly manag'd, *ponderous* Medicines, and *mercurial* Preparations, are not only the ſole univerſal *Attenuants* and *Deobſtruents*, but alſo the moſt ſimple, natural and efficacious Deſtroyers of Viſcidity and Acidity, or whatever ſalin *Cachexy*.

Chap. VI.

Of Milk, *its* Nature *and ſeveral* Kinds.

§. 11. I HAVE given the Preference in a low Diet, both from Obſervation and Experience, to *Milks*, viz. *Aſſes*, *Mares*, *Cows*, *Goats*, and *Womens*, all of them excellent in their Kind, and preferable in this Order: *Milk* is a *Medium* between young *Animal* Food and mere *Vegetables*. *Milk* is white Blood already made, adjuſted to all the *Meanders* of *Circulation*, and prepar'd by the Hand of Nature, and intended and *ſignatur'd* by its *Author*, for the cureing, nouriſhing and fortifying of weak, tender and diſeaſed *Animals*.

mals. *Asses* Milk needs no Concomitant, but in extremely *bilious Stomachs*; and I queſtion whether *teſtaceous* Powders join'd with it, do not hurt, inſtead of benefiting the Patient; if it purges, or even curdles, that is of no great Diſadvantage to the Patient, if he is not quite gone; for that *Curdling* ſhews great Redundancy of *Gall*, and an inflammatory State in the *chyliferous Tube*, which requires Vomiting, Purging, and Cooling, which the *Asses Milk* will do moſt gently and ſafely in ſome; and in a ſhort time theſe Effects will ceaſe, or may be eaſily removed by a little *Decoctum Fracaſtorii* at Night, or *Spa* or *Pyrmont* Water, or *Briſtol*, or any chalky Water, for common Drink, when theſe Symptoms exceed. But to be uſeful in very tender Caſes, *Asses Milk* ought to be eſteem'd *Food* rather than *Phyſic*, and taken accordingly; and tender Perſons, eſpecially in inflammatory Caſes or Diſeaſes, with acute Pains, ought to live on it, and take it in ſuch Quantities as they can bear. All *cacochymic* conſumptive thin *atrophous* Perſons ought to enter upon it directly, and continue it twice or three times a Day, till they are quite recovered; for I know nothing in Nature that will ſo ſoon recover and plump up the *muſcular* Fleſh and Habit, as *Asses Milk* long continued; for all Chyle that nouriſhes muſt firſt be reduced to the Nature and Conſiſtence of *Asses Milk*, elſe it will never kindly paſs into the

the *Lacteals*. I ſay nothing of *Mares* Milk, becauſe it is not much in Uſe in *England*, though much admired in *Eaſtern* Countries.

§. 12. SOME Perſons have a natural Averſion to *Cows Milk*; with others it curdles, and either binds too much, or purges, or ſo inflates and comes off in *Phlegm*, that they cannot take it without abundance of Pain and Suffering, which is an infinite Loſs to them, it being the ſafeſt, gentleſt and moſt certain and univerſal *Antidote* in all *chronical* Diſtempers, without Exception of one. The only certain way to make it agree, is firſt to cleanſe the *Primæ Viæ* by *Vomits*, or an Aloetic Pill now and then, mixing the *Milk* at firſt with *Briſtol*, or any other ſoft, but *chalky* Water, making it into a Gruel or Pudding with Seeds, as *Barley*, *Oats*, *Wheat*, *Sago*, *Rice*, and the like, putting ſometimes a Spoonful of White Wine to it; making Bread into Biskets with ſweet Cow Milk, without *Yeaſt* or *Salt*, with a quick Fireing, taking little at a time, but often; or, laſtly, putting a Spoonful of Compound Peony-water into a Quart, or a Tea Spoonful of Spirit of Hartſhorn to a Pint; and thus gradually carrying off the Load, Heavineſs, and Flatulence or Tumult it ſeems to raiſe, which entirely proceeds from the ill State of the *Stomach* and *Bowels*, that by a Diſtemper

are

are loaded with *Wind*, *Choler* and *Phlegm*, where the *concoctive* Powers are inflamed greatly, the *Glands* tumid, the *Lacteals* obſtructed, the *Perſpiration* ſtopp'd, the Blood *viſcid*, and all the *Functions* in a ruinous State; and not from the Nature of *Milk*, which is the mildeſt, ſofteſt, moſt nouriſhing, and ſalutary of all Foods; and the vulgar Error of its being *Phlegmatic*, is from its being the beſt and moſt effectual of all Balſamics and all Lambatives: As we ſee it is form'd by the Hand of Nature, for the Young, that is, the Weak and Tender; and there is no real Difference between a weak tender *Animal* by *Nature*, and one made ſo by a *Diſeaſe*, but that the Caſe is much worſe in the *laſt* than the *firſt*, and therefore this natural *Antidote* is more neceſſary in it: And I never knew one who labour'd and endeavour'd heartily at it, but at laſt overcame theſe Difficulties to his great Pleaſure and Satisfaction, unleſs the Caſe was totally gone: Drinking a little Green Tea, or tepid *Barley* or *Briſtol* Water, when it oppreſſes, will help it off and relieve. What makes *Milk* at firſt ſo diſagreeable, painful and oppreſſive, is the inflammatory *bilious* and *acrimonious* State of the Stomach and Bowels, which preſently turns the *Milk* into a hard cheeſy Curd, and ſends off the Whey into the *Lacteals* too thin and too faſt: Nothing in *Milk* but the ſweet white *Whey*, that is, the *Serum*, with the

lighteſt and ſmalleſt Particles of the Curd, nouriſhes, or can enter the ſtreight and inviſible Mouths of the *Lacteals*; and hence only is the nutritive Virtue of *Aſſes*, *Womens* and *Mares* Milk, and *Goats-whey*. Strong *Runnet*, or any ſtrong Acid, will turn *Milk* into a hard cheeſy *Curd*, which will neither come up nor go down without much Labour, Struggle, and Oppreſſion, eſpecially in weak or *bilious* Stomachs; weak *Runnet* will make a tender *Curd*, which will eaſily ſlide off: So that the whole *Art* of making Milk agree with any Stomach, is to prevent its turning into too hard a *Curd*, which any *Alcali* will do, Sugar, Crabs-eyes, *Chalk*, the *volatil* Spirits, and the like. As the *Viſcera* cool, and the *Choler* leſſens, the Diſorders from *Milk* evaniſh. However, I ſhould adviſe thoſe whoſe Stomach abounds with *Bile*, and ſo is in an inflammatory State, to live on Seeds, mealy and ſoft Roots, and well-dreſs'd Vegetables, for ſome time, eſpecially thoſe who have bad *Livers*, and an Overflowing of the *Gall*; for as to *conſumptive*, *ſcrophulous*, *ſcorbutical*, *diabetical* and *cancerous* Caſes, Milk and Seeds are the beſt *Antidot*, and ſeldom diſagrees. I have been told of two *Pigs*, fed one with the ſame Quantity of *Milk*, the other with ſweet *Cow-whey*; the laſt became the fatteſt, whiteſt and ſweeteſt. But the moſt infallible Remedy is for a long Time to chew a little good *Bark* at Noon, and ſome *Rhubarb* at Night conſtantly,

ſtantly, at leaſt till this Difficulty is overcome: The *firſt* gives a Tenſion and Spring to the Coats of the *chyliferous* Tube, the *ſecond* does not only the ſame, but alſo carries off the Load and Superfluity from it, before it accumulats and acidulats too high. *Sweet Cow-whey*, or *Orange-whey*, is an admirable *Antidot* in *ſcorbutic* and *cacochymic* Habits, in *bilious* Vomitings, and *hectic* or low feveriſh Caſes: It is preferable to moſt, if not all ſorts of Diet-drinks, *antiſcorbutic* Juices or *Ptiſans*; and they who would, at leaſt all the Summer Months, drink a Quart of this, more or leſs, half in the Morning, and half at Night, would go a great way to prevent *autumnal* Fevers, violent gouty *Paroxyſms* in Winter, *ſcorbutic* and *ſcrophulous* Humours and Defedations, and *cachectic* Juices; eſpecially if ſome particular Plant, as *Scurvy-graſs*, *Ground-ivy*, *Colts-foot*, *Baum*, *Sage*, or the like, were infus'd in it, or a little Milk of Sulphur (in caſe it is not of itſelf too *purgative*) were firſt taken in a Spoonful of it.

§. 13. *GOATS-MILK*, or rather its *Whey*, is a wonderful Strengthener and Cleanſer. It is ſurpriſing to me, that our Countrymen, after they have heard of the many great *Cures* in deplorable Caſes, perform'd by the drinking of *Goats-whey* in *Scotland*, *Ireland* and *Wales*, with a proper *Regimen* of Diet,

Air and Exerciſe, do not more generally apply to it at firſt in low conſumptive, waſteing, *ſcorbutic* and *cachectic* Caſes, or in all viſcid or *inflammatory* Juices. It was in great Eſteem among ancient *Phyſicians*; and the *Goats*, feeding in a pure Air, and high Places, on the moſt tender, light and *aromatic* Plants, muſt communicat a *Spirit*, *Balſam* and Sweetneſs to the *Whey*, and conſequently to thoſe that uſe it freely and plentifully, and accordingly we find its *Efficacy*; it gently purges, opens, cleanſes, cools and *balmifies*; and muſt ſurely be a more natural and gentle Diluent than any *artificial* Diet-drink whatſoever; and in *ſcorbutic*, *bilious* and *inflammatory* Caſes, is a moſt ſovereign *Antidot*. But it is common to ſee the moſt obvious, natural and ſimple, but moſt beneficial and ſanative Things ſlighted and overlooked, while new, foreign, coſtly and complicated ones, are admired: But Time and Suffering will give Wiſdom and Experience, if any thing will.

§. 14. I SHOULD here ſay ſomething of *Womens Milk*, which is indeed moſt natural and *homogeneous* to human Bodies in very low *conſumptive* Caſes, and is found extremely beneficial in them; not only to the Young and Tender, but to the Ancient Tender, and the Middle-aged, worn out by Diſeaſes. This *Milk* would be infinitly more beneficial and ſalutary, were it not for the *rank*, high, foul

foul Feeding and common Uncleanlineſs of *Nurſes*, and ſuch low-condition'd Perſons. If Nurſes liv'd on Cows-Milk, Seeds, Roots and *Vegetables*, well dreſs'd, and drank nothing but Toaſt and Water, or *Barley-water*, or unfermented Liquors, and were kept clean and ſweet, their Milk paſſing through infinitly more fine and delicat *Strainers* than thoſe of any *brute* Animal, would be a real *Nectar* in *Atrophies*, *paralytic* and *nervous* Caſes: But on the contrary, as Things are now conſtituted, *Nurſes* are the moſt humorous, voluptuous and domineering Perſons in a great Family; and if Food and Nutriture can have any Influence on the Body, Humours and Paſſions of the *Child*, I think it as neceſſary to have a healthy, clean, ſober, *Nurſe*, as ſuch a *Mother*, for the *Heir* of a Noble Family; ſince it is certain the Child is fed and increas'd as much, and is longer under the Influence of the *Nurſe's* Juices and Humours, than it is confin'd in the *Mother's* Bowels; and without all Doubt, the Body, *Humours* and *Paſſions* partake of the *Materials* with which Children, and even grown Perſons, are fed and nouriſh'd, as conſtant Experience and Obſervation teſtify; and I ſhould rather confine my Child to the innocent and undiſeas'd Nouriſhment of Water-gruel, Cow-milk, and Seeds, than to the Milk of a foul, rank, luxurious and vitious *Nurſe*.

THE

Natural Method *of* Cure

In the

DISEASES *of the* BODY,

And the

DISORDERS of the MIND

Depending thereon.

PART III.

CHAP. I.

REFLECIONS *on the* Nature *and* General Method *of* Cure *of* Chronical Diſtempers.

§. 1. I HAVE ſaid in the former Parts of this *Treatiſe*, that none can be long, or grievouſly ill, who has good-condition'd Blood and Juices, except from accidental or *epidemical* Diſtempers, from an habitual *Mal-Regimen* of Diet, or one which is improper for the Party, or from *meſeraic* Obſtructions, or *ſcirrhous* abdominal Glands. The moſt univerſal, efficacious and

adequat Cauſe of Diſtempers, is a conſtant and habitual Neglect of the ſole univerſal Antidot, or Preſervative againſt Diſeaſes, *viz.* the LIGHTEST and the LEAST of Meat and Drink a Man can be tolerably eaſy under. If the Perſon has brought into the World a *Taint* of his Parents corrupt Juices, or a natural Tendency of the Animal *Salts*, Spirits, and Blood *Globules*, to run into Cluſters, to unite, and be compreſs'd, that is, to beget foul and ſizy Blood; and if he does not duly and properly proſecute a thinning, low, cool, *balſamic* Regimen, gentle Evacuations, and ſweetening *alterative* Medicins, but goes on in the common *high Diet* of the *Voluptuous*, and the Exceſſes of thoſe who are born healthy and ſtrong, and with ſweet Juices, he may be ailing, ſickly, and tender all his *Life-time*; and if the Corruption and Malignity of his Juices have proceeded ſo far as quite to ſpoil ſome of the great and noble *Viſcera*, or putrify the *Canals* themſelves, he muſt ſoon and infallibly die. But if one has come into the World duly form'd with ſweet Blood and Juices, (like that of a Lamb) but by a conſtant Neglect of the *Lighteſt* and the *Leaſt*, ſpoils and corrupts his Blood and Juices *himſelf*, the Effect will be gradual, and by many ſlow Steps and Degrees, and with different Circumſtances, according to the natural Formation and Habitudes, and the Nature of the Materials of which the Exceſſes com-

committed consist. If the *Structure* of the *Lungs* be too streight originally, the Breast narrow in its accidental Formation, the *Sternum* too sharp, or if there be *Tubercules*, or Warts in them originally, or an Adhesion to the *Pleura*, or if the *bronchial* Arteries be too narrow, or its *Vesicles* too small, or the Ribs be compress'd; then by a viscid *Serum* or sizy Blood begot from such a *Mal-Regimen*, the Circulation labours or is interrupted *there*, and an *Asthma*, *Phthisis*, *Pleurisy* or *Peripneumonia* ensues, which terminat in an *Empyema*, *Consumption* or *Dropsy*. The same *sizy* Blood, and viscid *Serum*, if the *Lungs* be tolerably strong and well-form'd, (which corrupted Juices always first try to break, and hence the vulgar Notion, that *Colds* are the universal Cause of Diseases) will stop in the *capillary* Arteries, and Veins, which causes a *Rheumatism*, universal or particular: If thro' their natural Strength and Spring, all the small Vessels are not obstructed, then the most sizy and inflammatory Part is thrown on these *Organs* and Limbs, where the *Capillaries* are most compress'd, and least roomy, *viz.* the *Joints*, and so produces the *Gout*. If the *Serum*, besides its Size, be full of *Salts* and *Sulphurs*, then come *cutaneous* Foulnesses and Inflammations, as *Erisipelas*, *Scorbutic Eruptions*, *Leprosy*, *bilious* Ulcers, and the like. If a particular *Organ*, as the *Liver*, be obstructed, or naturally ill form'd, (as too large,

large, hard and unyeilding) the *Bile* ſtagnats and is corrupted in it, and *biliary* Concretions or Stones are formed in the *Gall-bladder*, and ſo a *Jaundice* enſues. If the whole Maſs of Blood and Juices be corrupted, and no one particular Part is weaker than another, but the whole *Syſtem* of both *Solids* and *Fluids* is diſorder'd, the Juices fizy, and the Solids putrified, broken, or relaxed, all the *animal* Functions labour; and thence the whole Train of *nervous*, *hyſterical*, *ſcorbutical* and *hypochondriacal Symptoms* ariſe. But univerſally all theſe Diſeaſes come from ſpoil'd, viſcid, *ſalin* or *inflammatory* Juices, as their primary and productive Cauſe, or what is commonly meant by a ſcorbutic Habit; at leaſt all the Good the beſt *Phyſicians* can do, is on theſe Juices; the Solids we can but little alter after Maturity.

§. 2. In all Caſes where there is a quick ſtrong *Pulſe*, or where there is a weak quick *Pulſe*, though ſmall, but oppreſs'd, or *labouring*, if it continue, and the Head aches, or is confuſed; in all *inflammatory* Caſes, ſuch as *Eryſipelas*, the *Roſe*, a painful *Rheumatiſm*, a *Pleuriſy*, or the like; in all Caſes attended with violent or acute Pain, be where it will; in almoſt every Caſe of a Diſtemper, (if nothing abſolutely forbid it) in the *firſt Inſtance*, Bleeding is abſolutely fit and indiſpenſable; and in painful Caſes with a quick

quick Pulſe, it ought to be plentiful at firſt, and repeated once or twice, or oftener, till the Pain abates, and the Pulſe ſubſides; for in all ſuch Cases, the Blood is either *too much*, *too hot*, or *too ſizy*, and generally all together: As to the particular Vein or Artery (if neceſſary) whence the Blood is to be taken, it is of no great Conſequence; but for a preſent Relief, the nearer the Part principally affected, the better. But I ſhould always prefer, in Chronical Caſes, ſmall and *partial* Bleedings, often repeated, to too large and plentiful ones; in every Caſe, and even in *eruptive* and *gouty* Caſes, the Eruption will be ſooner and fuller, and the *Gout* become more regular on Bleeding, if it is not too large; the Veins and Arteries thereby become more roomy, the Reſiſtance in the Circulation is leſs, the Force of the Heart, and of the *muſcular* Coats of the Blood-veſſels, becomes greater, in Proportion to the Reſiſtance of the leſs Quantity of *Blood* remaining, thereby to accelerat the *Circulation*, and forcibly to throw the peccant Humours on the Parts Nature deſigns them, the moſt remote from the noble *Organs*: And when any of the mentioned *Symptoms* ſubſiſt, I think a Repetition of Bleeding ought not to be heſitated upon, which, timeouſly and freely perform'd, has ſaved many a Life. *Half* a Pound, or a *whole*, or even *Two* Pounds at different Times, out of Thirty, or perhaps Forty or Fifty in the Whole, will never bring any one into

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a Diſeaſe, or real Danger; for Diſeaſes are in the bad Blood, and Life will be carried on, and even very tolerably, (at leaſt for a time) if the great *Organs* of Sanguification be ſound and ſtrong, even with *Aſſes Milk*, *Chicken-water*, or even *Water-gruel*, running only into the Blood, which will at laſt, by the Laws of *Sanguification*, turn into good Blood, as we know from great Wounds, the Experiments of *Tranſfuſion*, and violent *Hæmorrhages*. Lowneſs, Faintneſs, and a Diſability of Motion, may enſue on too great Bleeding, which ought not to be practiſed, but only ſmall frequent *Phlebotomies*; and theſe Lowneſſes are not Diſtempers that will endanger Life or Health; and by a proper *Regimen*, the Caſe will be conſtantly much mended from the better Maſs of Blood remaining: And it is not an unpleaſant *Speculation* to obſerve, that by the *Mechaniſm* of the Body, when a *Vein* is open'd with a large Orifice, every *Phlebotomy* draws out a larger Quantity of the viſcous or bad Blood than of the good or fluid Blood, in Proportion to the whole remaining Maſs; becauſe in the running Maſs the bad, *i. e.* the lighteſt Blood, by the circular Preſſion of all Fluids, is thrown outwards to the Sides of its containing *Tubes*; and the good, *i. e.* the heavieſt Blood, runs in the Middle, as is demonſtrable from the Laws of *Hydroſtatics*; and by Experience we find frequent Bleeding will exhauſt all the ſizy Blood at laſt.

If

If on a partial Bleeding (which, if in my Power, I always premiſe to the ordering of Medicins, if for no other Reaſon, yet to inquire into the State of the Juices and *Viſcera*, which, when perform'd with a large Orifice, I prefer to the *Pulſe*, the *Tongue*, the *Urine*, and the *Dejections* all together, to form my Indications) the Blood be tolerably good, the Proportion of the *Grume* to the *Serum* pretty near equal, the *Grume* not very viſcid, and the *Serum* not much diſcolour'd, nor ſaltiſh, then I conclude, after the *Univerſalia*, a *Regimen*, and Medicins for ſtrengthening and winding up the Solids, with Air, Exerciſe and domeſtic gentle *Purgations*, will do the Buſineſs, and I have ſeldom ſeen *Prognoſtics* from ſuch Appearances fail. But on the contrary, if the Blood, when let out of a large Orifice, and quite ſeparated, has a *Buff* or blueiſh Skin on the Top, is liveriſh, the *Serum* diſproportion'd, diſcolour'd and *ſaltiſh*, to a great Degree, then I am ſatisfy'd the Patient will never be quite well, nor continue long in an uniform and durable State of Health, without ſweetening, thinning and mending his Blood; and then I order (with a Diet) ſome Preparation of the *ponderous* Medicines, with the Juice of ſome antiſcorbutic or alterative Plants, proper and ſpecific for the Complaints and *Symptoms*, and a daily or familiar and gentle *Evacuation*, to rectify theſe, and at proper Diſtances during the *Cure*, partial and ſmall

Phle-

Phlebotomies repeated, to draw out the *old Maſs* of corrupted Blood, as they can bear it; and to give Room for a new *Chyle* from proper and *ſpecific Food*, to ſupply its Place, ſuch as may readily aſſimilat and mix with the morbid Juices, and rectify the whole Maſs; and it is not to be imagin'd how much theſe frequent and ſmall *Bleedings* contribute to quicken and accelerat this thorough Change and *Aſſimilation*, if diſcreetly managed. Suppoſe but an Ounce of proper well-digeſted and comminuted *Chyle* or Milk, (which we know is already *good Blood*) can aſſimilat with and be retain'd in the whole Habit, nay, ſuppoſe but a Dram a Day, (which I fear is more than will be allow'd in very bad Caſes) the Loſs of a few Pounds of Blood by ſuch partial and ſmall *Phlebotomies* will be repair'd in much leſs than Six, at leaſt Twelve Months time, with an equal Quantity of ſweet pure Blood, which will go a great way to rectify the whole Maſs, and leſſen all the *Symptoms*, except poſſibly that of Lowneſs, which however will alſo be much reliev'd; and if the *Phlebotomies* be prudently and properly tim'd, may be very little or none at all, eſpecially when the Blood is very bad: So that, on the Whole, gentle, partial and regulated *Phlebotomies*, as the Patient can bear, or the Caſe indicats, is one of the moſt general, effectual and expeditious Operations in the *Cure* of *chronical* Diſtempers. For I never once

once saw any real Hurt ensu'd on Bleeding, that I could rationally ascribe solely to *Bleeding*, and not to the Nature of the *Distemper*; and I was never much frighted for any kind of *Hæmorrhage* in any Part, unless it was with extreme Violence, if the Patient would submit to a proper cool Regimen of Diet; for under a *Diet* not forcing or feeding the *Hæmorrhage*, the Blood will stop of itself, when the Vessels are duely emptied, or the Superfluity of their *morbid Blood* has run off, Sweet Blood being the most sovereign of all animal *Styptics*: *Hectics* and *Consumptions*, in their first Stages, may be effectually prevented or cured by such partial *Phlebotomies* timeously administred; but in the subsequent *Stages* they will only precipitat their Fate. Some *Physicians* have alledg'd, that there is no certain *Prognostic* to be made of the State of the Patient, or Nature of the Distemper, from the Appearances of the Blood on letting, because they have observ'd from the commonly esteem'd *good* or *bad* Blood, the same or various and unaccountable *Symptoms* have ensu'd, and so seem'd not to depend on it. But these *Gentlemen* may with as much Reason dispute the Evidence of our Senses in other Cases: We know good or bad Blood by the same *Marks* and *Criterions*, that we judge of our Meat and Drink: Good Blood, such as I have defin'd it, may have happen'd in a bad Case; but then the *Glands*

of

of Secretion or *Perſpiration* have been obſtructed, or the Solids have been relax'd, tainted or ſpoil'd, or the Blood ſtill bad in the *Capillaries*, *Lymphatics* and *Glands*, or the *Regimen* has been too rich, or too much. With what I call bad Blood, a Man may go on, when of ſtrong Solids or *Nerves*, for ſome time, but *precarioufly*, and never in any Degree of perfect Health, which he can never have, till the *Blood* is render'd ſweet, thin and *balſamic*, and all the *Glands* open and pervious, and the *Secretions* regular and uniform; and in this alone perfect good Health conſiſts, which the *Lighteſt* and the *Leaſt* only can beget and maintain.

§. 3. I AM bold to ſay, no Operation, Remedy or *Antidote* in *Phyſic*, is ſo univerſal, ſpeedy and effectual as *Vomits*, when they can be given with any Safety, at leaſt in theſe our *Northern Climats*. I know not the Name or Kind of a Diſtemper afflicting the *animal Machin*, where *Vomits* are not beneficial, ſalutary, and of Efficacy; becauſe almoſt all our Diſeaſes proceed from too *much* and too *ſtrong* Meats and Drinks. It is a known *Fact*, that *Hippocrates*, the Father of *Phyſic*, adviſ'd for *Prevention*, the *fat* Patients to vomit twice a Month, and the *lean*, once. *Vomits* not only throw off concocted Impurities directly from the *Stomach*, the *Pylorus*, and the *Glands* about the *Abdomen* and *Heart*, (the

(the Source and Spring of Life and Motion) but by their Concuſſion and Convulſion, act upon the moſt diſtant *Veins*, *Arteries*, and *Glands*, and break open and ſqueeze every Part of the *Machin*. *Vomits* are in Diſeaſes what *Bombs* are in beſieging *Forts*; they are in *Phyſic*, and the *internal* diſeas'd Parts, (which cannot be otherwiſe reach'd) what Dreſſing, Cleanſing, *Cauterizing*, or even *Amputation*, reſpectively are in external *Surgery*, without which the internal *Sores* would grow foul, *gangrene* and *mortify*. To be afraid or heſitate in giving proper and proportion'd *Vomits* in internal Diſtempers, is as abſurd as to neglect or fear proper Dreſſings and Cleanſings in outward *Wounds* and *Sores*; for in bilious and phlegmatic *Stomachs* all the *Glands* are little *Ulcuſcula*, and there is as little Hazard of weakening theſe Organs employ'd in Vomiting, as there is of weakening the Arm or Leg in dreſſing an *Ulcer* in them, all the *Organs* and Limbs being animated Parts; and when the noxious Humour is remov'd, they heal and ſtrengthen of themſelves, by the Laws of *Circulation* and *Nutrition*. Indeed the *Stomach* itſelf has none, or but a very ſmall Share in the Act of *Vomiting*; it is the *Muſcles* of the *Abdomen* or *Breaſt* alone, that compreſs the *Stomach* to throw out its Contents; and the *Stomach* is no more hurt or weaken'd by the Action of *Vomiting*, than a *Clyſter-bag* is, by the *Apothecary's* ſqueezing

it artfully to inject its *Contents*. It is a ſeeming frightful Operation, and attended with ſome Pain and Sickneſs to the *Patient*; but it is the moſt beneficial and ſalutary, and of the moſt immediate Relief of any *Operation* in *Phyſic*; as is evident from what has been obſerved; for the *Too-high* or *Too-much* being the univerſal Cauſe of moſt *Britiſh* Diſtempers, and theſe incraſſating the Blood and Juices, and ſo interrupting the *animal Functions*, whatever will ſo compreſs, ſqueeze, and force open the internal *Organs* and *Glands*, as to make them the ſooneſt throw off their *Crudities* and *Mucus*, and *grind* and diſſolve the viſcid Juices, will ſooneſt and moſt effectually relieve; for all the morbid *Mucus* muſt be diſcharg'd from the Inſides of the *Canals*, before a dureable Relief or Cure can be expected; and this *Vomits* alone can do. I can think of no Caſe wherein they cannot, and ought not to be attempted, and perſiſted in, as the *Symptoms* return, but an *Hæmorrhage*, *Hæmoptoe* or *Rupture* of ſome Veſſel, and even theſe I have known perfectly cured by *Vomits*; and if a gentle, unſickening, eaſy Manner or *Medicin* for a *Vomit* were found, I think it would be of the greateſt and moſt univerſal Service in *Britiſh Phyſic*: But I fear it is contradictory; for the more active and forcible they are, the more beneficial they will be: And I know none preferable to the *Indian* Root, and its Prepa-

rations,

rations, join'd to a few Grains of *Tartar*, or Drams of Wine *Emetic*, as the Case and Patient require; or a Decoction of the bitter Plants, and even urging with the Finger, or a Feather, in relax'd *Stomachs* or *Glands*, if often at a time and daily repeated, give infinit Relief.

§. 4. NOTHING I know, or have tried, can supply the Place of a *Vomit*, when fit or necessary, but *Quicksilver*, or some of its Preparations, such as *Calomel*, *Alcalisatus*, *Æthiops*, and the like, join'd with a Purgative, as *Pilulæ Ruffi*, *Cochiæ Minores*, *de Aloe lot.* Jalap, Rhubarb, or the like. Quicksilver well kill'd, with any proper Mucilage, and a Purgative join'd, is the same with *Belloste's* Pills, found so effectual in many Cases, which thus may be much more properly fitted to the Patient and the Case, than these general Quack Medicins can be. These, some time continued, will by Degrees open the *Glands*, to make them spue out their gross and superfluous Contents, and carry off by their Weight, and deobstruent Powers, the Crudities and Superfluities of the Stomach and Bowels. But they will neither do it so soon, so effectually, nor so dureably as *Vomits* repeated, according to the Indications of Nature from the *Symptoms* of a *Nausea*, *Oppression*, *Flatulence*, *Watchfulness*, *Sickness*, *Inquietude* and *Inappetency*; and both together, I think, no cureable chronical Distemper

could withſtand. However, in Perſons fearful of *Vomits*, or where from a Rupture, or other forbidding Indication, they cannot be ſafely given, theſe are the only efficacious Medicins that can ſupply their Place; at leaſt, I think, they muſt be of this Tribe or Nature, fitted nicely to the Delicacy of the Patient, and the Nature of the Diſtemper; and I will venture to affirm, that all the *Quack* Medicins of any Virtue or Efficacy, however diverſify'd, have had *Mercury* in ſome Preparation, *Antimony*, and its Preparations, or ſome of the more dangerous mineral Medicins, (as *Arſenic* or *Cobalt*) with or without one kind of *Carthartic* or another, for their *Baſe*. For *mineral* Medicins ſeem deſign'd by Nature for high Feeders, and ſtrong Conſtitutions; and Vegetable ones, or mineral Waters, (as well as a vegetable Diet) for weak and delicat Conſtitutions, eſpecially when already under a low or *vegetable Diet*; and I am of Opinion, the more ſimple the *Mercurials* and *Cathartics* are, both are the better and ſafer. I think the Practice of Medicin has receiv'd great Benefit from the now experienc'd and familiar Uſe of *Quickſilver*, and its various Preparations; eſpecially ſince the univerſal Prejudice and Terror of it, and of its being appropriated to one Diſtemper only, is ſo worn off; and it is now under the Management of thoſe who underſtand its Nature and Operations, and that of the *animal Oeconomy*. Plain Quickſilver is certainly as innocent

cent and safe as *Asses Milk*, if judiciously and in proper Cases prescribed. I have often known it do no manner of Good, but never knew it do much Hurt, unless over-dos'd, or without interspers'd Purgatives, or given in an improper Case. In *asthmatic* Cases, *scrophulous Ulcers*, in *Tumours*, Foulnesses, and *Obstructions* of the *alimentary* Tube, of the *Mesentery*, *Lacteals* and other internal *Viscera*, swell'd and scirrhous *Glands* in any Part of the Body, a *Leprosy* or *Scurvy*, and viscid Blood and Juices, I think, *Hydrargyrum distillatum*, properly combin'd, is Sovereign, and the true *Panacea* appointed and mark'd out from its own *Signature* by Heaven; for it is the only known simple Fluid except Water and Air: Nothing but a *low Diet* can equal its Efficacy, and both, judiciously join'd, will *cure* every Distemper *cureable*. I do not know if it would not be beneficial even in *cancerous* and *scirrhous* Cases, at least at first, especially if the scirrhous and cancerous *Glands* were cut out, and the *corrupted* Part could possibly be quite taken away; for there can be no Danger but from its *Gravity*, and that might be prevented by small *Doses*, its deleterious Qualities being none; for it is never changed into any other Nature by Mixture or Division, but always resolves itself into *similar* lesser Parts of the same *specific* Nature. It would at least mend the whole Mass of the Juices, and open all the Obstructions, except in that particular *Gland*,

or *cancerous* Part; all the Ill it could do even there, would be from an *Hæmorrhage* or *Hæmoptoe*, or its Burſting; and if the Blood is mended, that would be none at all: But I ſhould not adviſe it, till the corrupt Part was cut out, if poſſible. But in no *cancerous* Caſe whatever can *Quickſilver-water* hurt; but on the contrary, long and obſtinately perſiſted in, and drunk plentifully, will do all that any other *Preparation of Mercury*, or the crude itſelf can do, without any Poſſibility of Danger, eſpecially join'd with a *total Milk and Seed Diet*, which timeouſly begun, I think, would antidote any cancerous Humour whatever. I am aſſured of a perfect Cure of a Cancer in the Tongue, which had reſiſted an Infinity of all Sorts of Medicins, cured by liveing eighteen Months on Aſſes Milk ſolely and only.

§. 5. THE ſafeſt and moſt effectual way of takeing *Quickſilver*, is after it has been diſtilled, well waſh'd with Salt and Water, and paſs'd throgh Chamois Leather, to purge it of all its *heterogenous Mixtures*, (with which the Dealers in it *ſophiſticat* it, and render it not only often ineffectual, but extremely pernicious) to take it in a Quill or clean *Tobacco-pipe*, about half an Ounce Morning and Night, and once a Week a gentle *Stomach* Purge of a Scruple or half a Drachm of Jalap with Nutmeg, (in *aſthmatic* or

or *anaſarcous* Caſes) or of the Pill *Ruffi*, or *Cochiæ Minores*, with a third Part *Quickſilver* well incorporated, or *de Aloe lot.* or *Rhubarb*, in *nervous*, *ſtomachic*, or *ſcrophulous* Caſes, to prevent its lodging in the Glands or Plicatures of the *Guts*, and to carry off all the Foulneſs, that it may diſengage or force off from the *Viſcera*, and to prevent its ſalivating, which this Management will do (for we have now certain Evidence, that it will paſs through every Pore, and even through the ſolid *parenchymatous* Subſtance of every Bowel and *Membrane*, when got to the Capillaries, and ſmaller Arteries, more readily almoſt, than it will through *Chamois* Leather); and with it, in very bad *cachectic* and *cacochymic* Habits, and *cancerous* or *ſcrophulous* Caſes, to direct a total Milk and Seed Diet, and Abſtinence from fermented Liquors; and even in middling Caſes, and Diſorders of the *alimentary Tube* only, to direct a very cool, low Broth or white Meat Diet, or rather that which I call the *trimming* or middling Diet, of one Day white *animal Food*, and another *Milk and Seed Meats*, without fermented Liquors. Thus manag'd, *Quickſilver* would perform great Cures, as I have ſeen; and in bad Caſes, where it has done nothing, I greatly ſuſpect, it has been becauſe it has not been thus manag'd, *viz.* with a low, or Milk and Seed Diet, and interſpers'd Stomach Purges.

§. 6. If there be a *Panacea* or *Univerſal Remedy* in Nature, eſpecially in Caſes not quite gone, where the *Viſcera* are not intirely ſpoil'd, and the Blood not turn'd into a *Fiſh-glew*, with a *Serum vitriolic* or *arſenic*, I think theſe three Medicins judiciouſly comb'in'd, duely dos'd, and ſufficiently perſiſted in, come neareſt to it, *viz. Alcaliſatus*, *Æthiops*, or *Cinnabar*, or ſome one or other of the Preparations of *Mercury*, *ſine Stimulo*, with Reſin of, or fine *Gum Guaiac*, *Camphire*, and Salt of Steel, (where Steel does not force too much, or over-heat) made into Pills, or into an Electuary, with Conſerve of Garden Scurvy-graſs, or Rob of Elder, and a Decoction of the Woods, or the *Gout Diet-drink* * ſweeten'd, with Milk drunk after it, join'd to a low Diet. Theſe mild *Mercurials* will moſt effectually attenuat and diſſolve the Viſcidity of the *Grume* of the Blood: at leaſt, I think, I may defy the Wit of Man to ſuggeſt a Mean or Medicin more likely to effect it, either from its own Nature and Qualities, or more confirm'd and approv'd by Experiment. The *Guaiac* will by its *Gum* and *Balſam* ſheath the *Salts* of the *Serum*, or ſoften and diſſolve them, and throw them off by the Pores of the Skin in a gentle *Diaphoreſis*, or *Perſpiration*, and inteſtinal Evacuation; and the *Salt of Steel* will keep up the Tenſion of the

* *Vide* §. 21. Chap. II.

Fibres

Fibres and *Solids*. These long continu'd, with a Decoction of the Woods, or the Gout Diet-drink before-mentioned, or small *Spruce-beer* of the same Intention, as used in *New-England*, will do all that *Physic* can do, in Cases not extremely bad, and come to the last Stage; particularly in *cacochymic* Cases in general; for it is well known what *Guaiac*, its *Gum*, its *Bark* and *Wood* have done in *venereal*, *scrophulous* and *scorbutic* Cases, where the Juices are vitiated to the most extreme Degree; and the attenuating, discutient and deobstruent Nature of *Camphire* in small Doses is now well known. The same Purpose may be obtain'd by the *Pilul. Æthiop*, wash'd down with a few Spoonfuls of the *Tinctura ad Stomachicos* in Water, in the *Edinburgh* Dispensary, in gentler Cases. But nothing will do without a cool, low and sweet *Regimen*; and when Air and Exercise is join'd, and these long persisted in, it is almost all, I think, *Mortality* will admit.

Chap. II.

Observations *on the* Natural Method *of* Cure *in particular* Chronical Distempers.

Hystericism *or* Hypochondriacism.

§. 7. In *Nervous* Cases of all Kinds, that are not extremely bad, or attended with *Fits*, *Convulsions*, *epileptic* or *apoplectic Paroxysms* frequently returning; for a general and chronical

chronical Medicin, I know none preferable to theſe following: The *Alcaliſatus,* or the other *Mercurials ſine Stimulo,* the fœtid *Gums,* with the *Sal Succini* and *Martis,* made into Pills, and waſh'd down with an *Apozem* of *Radic Valerian Sylveſtris, Quinquina,* the *Miſleto,* and a few Seeds, on ſimple *Chamomil* Flower-water, or Fountain-water, with ſome interſpers'd Stomach Purges, as Hiera-Picra, Tincture of Rhubarb with Bark, *Pilul. Ruffi,* &c. but eſpecially repeated *Vomits,* a Regimen, Air and Exerciſe. I think theſe anſwer all the Intentions a Man of Experience and *Philoſophy,* and one acquainted with the *animal Oeconomy,* can form to himſelf in ſuch Caſes, in their firſt Stages: It is true, in bad Caſes, and worn-out *Conſtitutions,* nothing will ſoon do; but theſe I know (rationally and experimentally) will, in time, *antidot* all the general Cauſes of theſe Diſorders, in their firſt Stages, if perſiſted in; and I ſee no Reaſon why one ſhould change ſuch a Courſe, there being no rational Probability of altering it for a better or more effectual, unleſs ſome particular *Symptoms* demand a more immediat Attention and Relief.

Of Foetids.

§. 8. For a preſent Relief on extreme Lowneſs, Oppreſſion or *Anxiety,* for a *Filip* or *Spur,* I think nothing can exceed a Tincture of true *Aſſa-fœtida* and *Wood-ſoot,* made on compound Pæony-water, with a Tincture of

of *Caſtor* and *Sal Volatile*, and a few Drops of *Oleum Succini* added to it. A Tea Spoonful, two or three of this, in a ſmall Draught of the above Apozem, will ſooner, more effectually and longer give Relief to theſe Symptoms, than any thing I know: Even your Cordials of Sir *Walter Raleigh*, and the like, I think, are only dry Drams, and they are ſcarce Reliefs, and not Cures. With this Intention only theſe perſpiratory, hot and forceing Medicines ought to be given, and no Hope or Expectation is to be put in them further, but as one who ſtands to draw his Breath only for a Moment, when he has a ſteep Hill to aſcend: But the whole Streſs of the Cure is to be put in *Alteratives* and Diet; for ſuch ſtimulating *Medicines* then become of wonderful preſent Benefit; but they ought to be laid aſide, when any Relief is got by them, till the next *Attack*, and the general Method and Medicines purſu'd, otherwiſe their Efficacy by frequent *Uſe* will be worn out. As to the Effect of theſe Medicins on any ſudden Attack of Lowneſs, Oppreſſion, Anxiety, or *nervous Dyſpnea*, (if a Sickneſs at Stomach is not, as it moſtly is, the *Caſe*, and then they ought to be taken in ſome Cordial, and afterwards ſome *Stomach Purge* ought to ſucceed, or a *Vomit* premitted, if Time allows) they, as all the *Eaſtern Gums*, *Fœtids* and *Volatils*, force the Perſpiration for a ſhort Time, and drive the viſcid Juices to the Circumference,

and

and by their *actual* Heat melt perhaps the *gelatin Serum* in the Capillaries (as Fire melts *Jelly* of *Hartſhorn*); for there can be no Virtue in Soot, but from the actual Fire lodg'd in it, or from its *acid Oil*; the one of which melts the *gelatin Serum*, while the other vellicates the Solids to force on the languiſhing *Circulation*, which makes it of more preſent Efficacy than even *Aſſa-fœtida* itſelf, and the Eaſtern Gums alone, which have ſhut up in them *ſolar* Heat, or Fire, or the Matter (perhaps) that makes the Rays or Fluid of the *Sun's* Heat. Of this Claſs alſo are the *volatil Salts*, which, I think, on this Conſideration, are preferable to the *Eaſtern Gums*: The *Gums* are ſolar Rays included in a viſcous *Balſam*; *Soot* and *volatil Salts* are culinary Heat join'd to an Acid; and hence alone the *Philoſophy* of their Operation and Effects is to be deduc'd. For there is no material Difference, but in Subtilty, between *Solar* and *Culinary* Heat.

A Rheumatism.

§. 9. In a *Rheumatiſm*, or beginning *Viſcidity* of the Juices, where the *Size* and *Viſcoſity* is uniform, and almoſt equally diſpers'd over the whole Maſs, or is conſtantly flitting, and not fix'd to particular Parts, (which is what is commonly called a flying *Gout* or *Rheumatiſm*) the *Reſin* or *Gum Guaiac*, either alone (in liberal Doſes) or join'd to the *Mercurials ſine Stimulo*, with a cool, ſoft, low Diet,

Diet, either Vegetable, or of white Meats, with little or no fermented Liquors, will do great Matters, as I have often experienc'd. For on Bleeding, (and frequent ſmall *Phlebotomies* ought to be interſpers'd) though the Blood be ſizy, with a thick *Buff*, and the *Serum* yellow or dirty, theſe Medicins and the *Diet*, ſome time continu'd, will infallibly alter it, or ſheath its *Salts*, make its Curd more thin and *florid*, and its *Serum* of a leſs dark Colour, rebate the Violence of the Pains, and bring natural Sleep, Eaſe and Chearfulneſs, as I have viſibly and ſenſibly ſeen, and is a conſtant and undeniable *Fact*, eſpecially if the Corruption be not too deep, and the Conſtitution has ever been tolerably good and firm, and Life not too far ſpent. But the Effect will be more readily obtain'd, if *Vomits* and *mercurial* Purges, as of *Calomel* with *Reſin* of *Jalap*, be interſpers'd, as the Strength of the Patient will permit.

SCORBUTIC BLOTCHES *and* LEPROSY.

§. 10. IN *ſcorbutic* Blotches, white cruſted *Scabs*, and peeling Scurfs, which approach towards a *Leproſy*, eſpecially if they be any ways moiſt, Pills or an Electuary made with *Alcaliſatus*, *Antimony Diaphoretic*, not much waſh'd, (which hinders its Efficacy) *native Cinnabar*, and Powder of *Jalap*, duely dos'd and properly form'd, and waſh'd down with ſweet *Cow-whey*, *Orange-whey*, or *Bates's* *Anti-*

Antiſcorbutic Juices, will do great Service, eſpecially if the Diſtemper be recent, and the Perſon ſtrong. The *aluminous* and chalky Waters will help this Caſe much, (eſpecially if the *Sores* be fluid and running) particularly thoſe not combin'd with much *Iron*, but with *Talk* and *Nitre*, or *Alum*, as thoſe of *Holt* and *Chiltenham* moſt certainly are; and if frequent *Vomits* and *mercurial Purges* be interſpers'd, but eſpecially if a *white Meat* Diet, and Abſtinence from all fermented Liquors, be join'd, I think the Method cannot fail. But in very tender Caſes, and in the *Fair Sex*, (to whom cutaneous *Defedations* are more grievous and mortifying, and who are not able to bear theſe active and ſtrong Medicines) nothing will do ſo effectually as unwaſh'd *Diaphoretic Antimony* with *Milk of Sulphur*, and *Millepedes* waſh'd down with *Aſſes Milk*, a total Milk and Vegetable Diet, and drinking nothing but the *cretaceous* Waters, ſuch as the *Briſtol*, and thoſe in the Neighbourhood of *Bath*; and I have known for a Certainty this Method cure totally and laſtingly in that *Sex*, when it has reſiſted *Salivation*, the *alterative Ponderoſe*, the *Precipitate per ſe*, all the *Antiſcorbutics*, and *Wood-drinks*, long perſiſted in, and the common *Quack-ſweating* Methods, under even a very temperat Diet of *animal Food*, and common fermented Liquors: And I am ſatisfy'd, that even the *Lepra Græcorum* and *Arabum* could not

not long reſiſt this Method, eſpecially with a total Milk or Vegetable Diet. In ſuch Conſtitutions the *Meſhes* of the *Cutis* and *Cuticula*, and the Orifices of the *perſpiratory Ducts* being too ſtreight and fine, or quite ſhut, the *Salts* of *animal Foods*, and fermented Liquors, being conſtantly entangled in them, corrode the Scarf Skin, and there produce corroſive *Foulneſſes*. Some learned Profeſſors promis'd a Cure to weak Perſons by Woods, ſweating Machins, even under a free *animal* Diet; but they have only deluded the Patients Hopes, a little Time bringing all the *Symptoms* back again.

Intermittent Fevers.

§. 11. *INTERMITTENTS* or *periodical* Diſtempers are a kind of acute *chronical* Diſeaſes; they are the middle Point between violent acute Diſtempers, and obſtinat *chronical* ones; and I never ſaw an obſtinat, cruel, habitual *chronical* Diſtemper acquired, but was begun by an *Intermittent* Fever not afterwards duely treated by the altering ponderous Remedies, and a *Regimen*, which alone can obviate their ill Effects, not of the Intermittents, (for all *acute* Diſtempers, and indeed all Diſtempers whatever, are a Labour of Nature to purify the Juices, according to the common Saying, *Dolor eſt Medicina doloris*) but the bad State of the Fluids, which cauſes them; and therefore they may come into my Deſign

ſign of treating here of *chronical* Diſtempers only; eſpecially ſince they have been ſo various and complicated of late Years. Indeed almoſt all *chronical* Diſtempers admit of theſe *Periods* in ſome Degree or another: The *Gout*, the *Rheumatiſm*, but eſpecially thoſe called *nervous* Diſtempers, have generally one Day or more worſe, and another better ſenſibly. As to a true, ſimple, genuine *Intermittent*, it is moſt infallibly the *Struggle* and Labour of a *ſizy* Blood, when a great Part of the *Size* has been gradually accumulated, and collected towards the Middle of the ſmall Paſſage from the *Arteries* into the *Veins*, or the lateral Branches of both; for the *Arteries* converging gently, many of them terminat in the *Veins* in one continued *Tube*, (except the lateral ones, which form the *Glands*) which again gently diverging (at leaſt the *Trunk-pipes*) form, as it were, a double *Cone*: The Blood, when ſizy, paſſing with Difficulty this middle narrow Space, (like the Waters of a River, when the Chanel is narrow, and contracted in one particular Place) rages, and runs with *Impetuoſity*; and the thinneſt getting through firſt, the *Size* is by Degrees left in the wider Part of the *Tube*, till the Whole of it comes to be collected at this narrow Paſſage. Then, by Force of the *Heart*, and *muſcular* Coats of the *Arteries*, the Whole of the new-gather'd Maſs of this *Size* being forc'd to paſs there alſo, by the Laws of the *Circulation*,

lation, *Nature* and the whole *animal Oeconomy* labours to effect it: hence first the *Chill*, and *Rigours* in this Labour of Nature, because little warm Blood can reach the *Capillary* Veins and Extremities. This Stage must always be attended with a *quick Pulse*, tho' the Patient may be in the *Chill* of Death, which shews the *Heart* and muscular Coats of the *Arteries* are in violent Action and Labour, while the *Size* is thus discharging thro' this narrow *Pass*. By this means the *Size* is in a great Degree dissolv'd and broken; and then entering into the wider Veins, the *Serum* being render'd thinner, is made capable to be thrown off with Violence by the lateral Branches, and the Orifices of the *perspiratory Ducts*. The finest of its broken and watry *Particles* get through, and the serous Parts of the Blood are thus discharged by a profuse *Sweat*. This is not an *Hypothesis*, but the real and true *Theory* of simple and uncompounded *Intermittents*, founded on Experiment, which tho' are infinitely varied and complicated according to the Degree of the *Size*, the Constitution and Age of the Patient, and many other Cirumstances, which I have not room to detail. *Vide Hales*, Part II.

§. 12. When an *Intermittent* happens, the Patient is not in the worst State of Blood and Juices; that may subsist in a great many other Cases and Distempers, particularly in the

Gout, Rheumatiſm, Jaundice, Scurvy, Anaſarca, Aſthma, and the like, eſpecially in their laſt Stages. I have known an *Intermittent* happen, when the Blood has been in a much better State, than it was before; *viz.* after uſeing the proper Means of alterative *Ponderous* Medicins, and a low Diet to mend it. I always take it for a certain Sign of Convaleſcence, and a dureable Mending, when it happens in a very bad Caſe; and to be produced moſtly and immediatly by the greater Relaxation of the Solids, eſpecially when under a cool low Diet, which the *Bark* and other *Aſtringents* quickly mend and wind up. In ſimple *Intermittents*, and young ſound Conſtitutions, any thing that will conſtringe the *Fibres* and *Solids*, to give them a little more Spring and Force, ſo as to make the *Size* paſs through the *Streights* eaſily, or diſcharge it by the perſpiratory Ducts, will do: as Juice of *Lemons*, a Decoction of *Chamomil Flowers*, or of *Acorns*, or the Powder of theſe; any *aſtringent* Vegetable, or *Mineral* will do it; as *Spirit* of *Vitriol*, of *Nitre*, of *Sulphur*, of Sea Salt, Tinctures of *Steel*, *Spa*, *Pyrmont* or *Tunbridge* Waters, and the like; ſo that it is not the *Bark* alone, or the *Bark* as a *Specific*, but the *Bark* as one of the beſt, cooleſt, and moſt eaſily digeſted *Vegetable Aſtringents*, that cures *Intermittents*, as it gives a Firmneſs and *Elaſticity* to the Fibres, and unites and gives a due Coheſion and Conſiſtence to the

the *Blood Globules* thus broken and divided by the Diſtemper, and by the Labour of Nature, in forceing the Fluids through the *evaneſcent Arteries* into the *Veins*, and through the Strainers and *perſpiratory Glands*; but this the Bark, or even any of theſe others mention'd, will do with Certainty, in ſimple and benign *Intermittents*, and healthy Conſtitutions only.

§. 13. In many Caſes of *Intermittents*, where the Conſtitution is bad, and the Solids corrupted, the *Bark* (of which a *Drachm* or two conſtantly ſecur'd againſt Relapſes, when it firſt came into *Europe*) will now do nothing. The true Reaſon of which is not only the *Sophiſtication* of the *Quinquina*, which now out of Avarice (as all other foreign Medicins are) is mixt with twenty other inſignificant or perhaps pernicious *Barks*, which are not eaſily diſcover'd or ſeparated; but alſo from the univerſal *Depravation* of the Blood and Humours of Patients now-a-days, to what they might have been formerly: Upon which Account it is an excellent Preparative, not only to cool and thin the Blood by previous *Vomits*, *Stomach Purges*, and *ſalin* Juice of Lemon *Draughts*, and to unite *Rhubarb* with *Bark* and *Aromatics*, but alſo to let the Patient have as many *Fits* of the *Fever* as he can poſſibly bear, in order to attenuat and divide the Blood in paſſing through theſe ſtreight and

narrow Paſſages; and by the quicker *Circulation* that neceſſarily attends it, before any *ſpecific* or ſtrong *Aſtringent* be tried, to tighten the Fibres, and ſtop the *Paroxyſms*; and perhaps the very beſt were to leave it intirely to ſuch general Medicins, that it might extinguiſh of itſelf; and then the Blood would be eminently fined and thinned, and high Health would enſue. But ſince the Patient will ſeldom ſubmit to this ſo tedious a Cure, I think there is no ſuch certain and ſalutary a Method, as in the Intervals of the Fits to adminiſter *Vomits*, and the *mild Mercurials* and *Attenuants*, together with the *Bark*, to mend the Blood and Juices; and therefore I never fail, after I have for a due time ſtopt the firſt *Paroxyſms*, to order *Æthiops Alcaliſat. Antimony Diaphoretic*, *Gum Guaiac*, and Salt of *Steel*, with Extract of the *Bark*, in ſome Form or other, waſh'd down with *Spa* or *Pyrmont* Water; or a Decoction of the *Bark*, to be continued for a long time after the Fits are ſtopt by Aſtringents, together with a Regimen and Rideing. There are ſome, who in ſtrong and robuſt military Conſtitutions join *Arſenic* five or ſix times ſublimed (which only divides its Parts) with *Quickſilver*, and make it up in Pills with Mucilages, and give eight or ten or a Dozen ſuch a Day. But I am never for Snuffing a *Candle* with a *Cannon* Ball, when a Pair of Snuffers are at hand, which will do it more ſafely and cleanly, tho'

perhaps

perhaps not so soon. These are dangerous and deleterious Medicins: tho' strong Persons may bear them for a time, yet they insensibly destroy them. The Observation on *Crises*, and *critical Symptoms*, so regular and certain, in *Southern* Climats, from the Regularity of their *Seasons* and *Diet*, will seldom take place in our *Northern Countries*; tho' I think the great Affair of *Evacuations* and *Alteratives* in *Fevers* of all kinds, ought to be before they come to their *State*; afterwards Nature is to be left to its own Work, with warm *Dilution* only.

A Scrophula.

§. 14. A *SCROPHULA* is a mere *glandular* Case; *viz.* where-ever an *Emunctory Gland* or *Glands* are dureably swell'd, obstructed, or *scirrhous*, whether *impostbumated* or not, there is some Degree of a true *Scrophula*. The *Glands* are the last and the least Organs of *serous Secretion*; the *Diameters* of their component *Tubes* are so infinitly small, and their *Circumvolutions* and *Plicatures* often so numerous, that, in delicat Nerves, and tender Constitutions, the smallest inattended Injury or Bruise, the least Degree of *Size* in the Blood, will tumefy and obstruct them, or if they be originally or naturally lax. They have special and particular *Membranes*, that coat and involve them; so that when they are tumefied and obstructed, their *excretory Duct* is thereby

ſhut up, (as a full-ſtuff'd Purſe ſhuts its Mouth ſtrongeſt) that it can ſcarce be reach'd by Medicin, or empty'd by the Laws of the *Animal Oeconomy*; and this Coat, thus *Hermetically* ſeal'd, as it were, becomes a *Cyſtis* which can never be open'd, and nothing but *Exciſion* can extract it; and this Cauſe is ſo univerſal in all Countries where *Animal* Food, and ſtrong fermented Liquors, are too freely uſed, that there is ſcarce an Individual that has not theſe *Scrophulous Glands*, internally or externally, in ſome one Degree or other, ſooner or later. In *Britain* ſcarce a ſingle Individual is without ſome Degree or other of the *Scrophula*, or *Scurvy*, as the general Cauſes of all their Miſeries, at leaſt after Thirty-five.

The King's Evil.

§. 15. In early *Scrophulous* Diſtempers, (I call the *Scrophula* the firſt *Stage*, and the *Kings Evil* the ſecond *Stage* of the ſame Diſtemper) I know nothing of any Efficacy to extirpat them, but the *mild Mercurials*, or rather *Quickſilver* itſelf, at leaſt *Aqua Mercurialis*, with a *Vegetable*, or even a *total Milk* Diet, both long continu'd. In ſuch Caſes, eſpecially in young Perſons, the *ſcrophulous Glands* are all *incyſtated*, and there is no Poſſibility of opening or diſſolving them. If they are external, they may be cut out; but if internal, (as is moſt commonly the Caſe) there is nothing to be done, but by ſweetening and thinning

thinning the Juices, and thereby hindering their Compreſſion from Fulneſs or *unroomy* Veſſels or Bowels, to keep them ſoft and yielding, that they may not interrupt the *Circulation*, or the Play of the *nervous Fibres*. All the Uſe of dry'd *Sponge*, *Volatil Salts*, *Flag-root*, and the like, I think, trifling and deluſive; even the *Wood-drinks*, tho' moſt *ſpecious*, are here of no great Value. The moſt effectual Method I know, have try'd, or can conceive, is a total *Milk* and *Seed* Diet, *Quickſilver*, or ſome of its Preparations with *Millepedes* in Subſtance and unprepared, together with interſperſed *Purges* and *Vomits*, which in time, if it does not totally diſſolve or extinguiſh theſe *Glands*, or open the *incyſted Tumours*, will dry them away, and the *Circulation* will find Means, and inlarge *Canals*, to do without them; as the *Navel-ſtring* of new-born Infants falls away, when it is no longer of Uſe; or as the Blood, when an *Artery* is cut in two, in the larger Trunk, inlarges the lateral ones, and thereby brings the ſame Quantity of Blood and Spirits to nouriſh and cheriſh the circumambient Parts. At leaſt the inlarged and *incyſted Gland*, by the conſequent Fluidity, Sweetneſs and Thinneſs of the reſt of the Juices, will lie as eaſy, and give no more Pain or Trouble, than the *Nail* on one's Finger, unleſs it be *tumefied* and blown up by a high Diet. And I

think *hereditary Scrophulous* Perſons, eſpecially thoſe advanced towards the *Meridian* of Life, that ſuffer under theſe *Heart-breaking* Lowneſſes and Anxieties, conſequent upon internal, *meſeraick, ſcrophulous,* obſtructed *Glands,* are as directly call'd on by Heaven to enter upon a *low* Diet, and *ponderous* Medicins, as if an Angel came from it to command them; and to continue it to the laſt of Life, if they would have free Spirits, and Freedom from Pain continu'd with them. The *Aqua Argentea,* or Silver Water, (which is two Quarts of Fountain Water boil'd with four Ounces of *Quickſilver* to one Quart) with *Milk, Jelly* of *Currans,* of *Oranges,* or even with a little White Wine, would help them much: But a *vegetable* and *Milk* Diet is their proper and natural Food, as much as Seeds are that of ſmall Birds.

An Asthma.

§. 16. In *Aſthma's* and *Chronical* Affections of the *Lungs,* I know no better Medicin, than purify'd Quickſilver made into Pills with *Gum Ammoniac,* boil'd *Venice Turpentine,* or with *Lucatellus's Balſam,* and occaſionally with *Maſſ. Pilular. Ruffi, Cochiæ minores,* or *de Aloe lota,* of any of theſe, two Parts, and one Part *Quickſilver* purified, as a Purge now-and-then, or the *Pilulæ Scilliticæ,* of the *Edinburg* Diſpenſatory: Theſe, long continu'd with a ſoft, cool Diet, without any

any Liquor but *Barley Water*, weak *Mead*, or *Metheglin* for common Drink, will help much in the Cure of an Aſthma in its firſt Stage. *Mercury* here, if in any Caſe at all, is a *Specific*; here its ſmall Parts break the *Viſcidity* and Tenacity of the *Serum* in the *Pulmonary* Veſſels, and inlarge, like ſo many *Wedges* or *Stretchers*, the ſmalleſt *Arteries*, and widen their *Diameters*, to let the Blood circulat through them, that it may there be impregnated with the *Nitre* of the inſpir'd Air. This Method, long continu'd, cannot fail to make the Fits eaſy, and at laſt totally to cure them, as I have often ſeen: For the abſolute Cure of an *Aſthma* depends on thinning the Blood, and ſtretching the *Pulmonic* Arteries: *Regimen* can only do the *firſt*, and *Mercury* in ſome Shape is likelieſt to do the *laſt*. If the Cure has been imperfect, it is becauſe this *Regimen* has not been conſtantly and exactly perſiſted in; or that the *Lungs*, or ſome of the great *Viſcera*, have been quite ſpoil'd, or that *Life* has been too far advanced for a total Cure. And by this Method, early and long perſiſted in, two of the moſt common, yet moſt fatal, Conſequences of an *Aſthma* are prevented in Perſons ſomewhat advanced to Maturity; *viz. Infecundity* and an *Aſcites*, the firſt preceding generally the laſt; for if the Blood cannot freely and readily paſs through the *infiniteſimal Pulmonary* Arteries,

and

and between the *Bronchial Veſicles*, it can never be ſufficiently broken and thinn'd, (the great End of the Compreſſure and *Mechaniſm* of the Lungs, and of the Cure of an *Aſthma*) nor form'd into ſmall enough *Globules*, nor (which is moſt material) can it be ſufficiently impregnated with the *Nitre* of the Air, the great Principle of its Vitality; and ſo being groſs, grumous and vapid, furniſhes not ſufficient Spirit and Vigour for *Fecundity*; and not being ſufficiently comminuted, is not ſent back with ſufficient *Velocity*, or, which is the ſame, makes too ſtrong a *Reſiſtance* on the Extremities; ſo that, by its increas'd *Gravity*, it cannot return again with due Velocity and Vigour by the *Veins* to the *Lungs*; but firſt ſtagnates in the Feet and Ancles, and after burſts the *Lymphatics* of the *Abdomen*, putrifies the *Peritonæum*, and ouzes through the Sides of the thin, now rotten *lymphatic* Tubes and Canals. In Paroxyſms nothing relieves like Squill Vomits, or daily Thumb Vomits, and *Lac Ammoniacum* in large Doſes, made on ſimple Penyroyal Water frequently after.

A Dropsy.

§. 17. A true form'd *Aſcites* is no more to be cur'd, than a confirm'd *Phthiſis* from putrify'd *Lungs* or *Tubercules*. The *Lymphatics* are here burſt, the *Peritonæum* putrify'd and conſum'd, the *Grume* of the Blood

Blood become a *Clot* of viſcous *Glew*, and the *Serum* a mere *Lixivium*. Theſe can never be reſtored, and all that can be expected in ſuch a State is a mere *palliative* Cure, to paſs off this *lixivious Serum*, as faſt as it drops into the Cavities, to keep the Paſſages of all the *Secretions* as pervious as can be, to take in things of as little Volume, and as ſoft and unactive in their Nature, as poſſible, and to endeavour to mend, thin and ſweeten the Blood, as much as the Nature of the Diſtemper will admit; and I think theſe are all the rational *Intentions*, that in ſuch a *Caſe* can be form'd. All violent Remedies, as ſtrong *Vomits*, *Purges*, and *Diuretics*, are precipitating *Fate* only at the Expence of a little preſent Relief; they only empty, to fill the faſter, by inlarging the beginning *Ruptures* of the *Lymphatics*. The acrid pungent Plants, with the cooling *acid* Juices, and the ſtimulating aperient *Salts*, ſeem to anſwer this palliative Intention beſt; ſuch as are *Muſtard* Seed, *Juniper* Berries, *Horſe-radiſh*, *Aron* Roots compounded with *Salt* of *Tartar*, *Nitre*, *Wormwood*, *Sea Salt*, or the Lixivial *Salts* of Plants; on which Account *Mercurius dulcis* and *Alcaliſatus*, and Salt of ſome diuretic Plant, with *Rob* of *Elder*, have ſuch ſenſible Effects in this Diſtemper, as I have often experienced in its firſt Stages, and in young Perſons; but nothing will do without a Diet

of

of the *Lighteſt* and *Leaſt*, to prevent the forceing the *Serum* through the *Ruptures* of the *Lymphatics*, or the widen'd *Meſhes* of the Sides of the Tubes. It is a vulgar Error, that *Water-drinking* is of dangerous Conſequence in this Caſe; nothing is more *falſe*. Too great a Quantity of any Liquor is wrong, becauſe, by its Weight, it may increaſe the *Rupture* of the *Lymphatics*; but this does not happen from the *Quality* of common Water, but the Quantity of it; for no Liquor is of a more innocent and beneficial Nature, ſo ſoft, light and cool, as pure Water. 'Tis true, in ſuch a Caſe, the leſs of any Liquor, the better; but if any, nothing can exceed Sherbet, of Water and Juice of Oranges, ſweeten'd with a little *Honey*; and I have known many a *Dropſy*, in free Drinkers, prevented by drinking nothing but Water, as it alone infallibly cures an *Anaſarca* at laſt, if early begun.

An Anasarca.

§. 18. As to an *Anaſarca*, if no other dangerous Diſtemper be complicated with it, it being only an univerſal *Size* of the Blood and Juices, and a conſequent *Relaxation* of the *Fibres* and *Solids*, whereby the Reſiſtance of the Humours is ſtronger than the Force of the Heart and Arteries, the *Circulation* is ſlow from the Extremities upwards to the *Heart* and *Lungs*, whence the Feet or Hands

Hands become tumefy'd; a total and abſolute Cure may be expected by firſt attenuating the Juices by the *ponderous* Medicins, ſuch as *Æthiops, Cinnabar Alcaliſatus*, with Gum *Guaiac, Nitre; Salt* of *Wormwood*, with *Vitriolum Martis* towards the End, and the like; together with proper Evacuation, Vomits eſpecially, and a low, cool, thin Diet; and then, when the Blood is thin enough, and the tumefied Parts ſubſide, bracing with *Steel* and *Bitters*, or the *Acidulæ*, with conſtant Exerciſe. I have known this totally and abſolutely cur'd by Exerciſe, and drinking nothing but fair Water alone; and I think Water-drinking can never fail, if the Party is not too far gone in Life, or is not naturally weak and delicat, or has not been long flagrantly intemperat.

A Diabetes.

§. 19. Next to an *Aſcites* in its Nature, is a *Diabetes*, which is commonly call'd *Hydrops ad matulam*. I take it to be only a Symptom, or the laſt Stage of a hot and univerſal *Scurvy*, where, in a weak *nervous* Conſtitution, too high, hot, and inflammatory a Diet (at leaſt for ſuch a Conſtitution) has been long inadvertently perſiſted in; or when, in a robuſt firm Conſtitution, *ſpirituous* and burning Liquors, and ſalt and *high-ſeaſon'd* Meats, have been obſtinatly indulged; whereby the Blood (being of the Nature of Milk)

Milk) is broken and *fus'd* by the great Quantity of *animal* and *lixivious Salts* in it, which turns it, and ſeparats the *Curd* from the *Whey*, as *Runnet* turns Milk; and ſo all the *Serum* runs off through the moſt patent Paſſages, or the new *Chyle* cannot incorporat with the old glutinous Grume of the Blood; and accordingly, in a deep and inveterat *Diabetes*, I have ſeen it run off the Patient in a few Days: A conſtant *Thirſt*, a ſmall, *low*, *hectical* Pulſe, with great Oppreſſion and Anxiety, are the *Symptoms* which diſtinguiſh it from the Floods of pale Water in *Hyſteric* Caſes, (which yet is of the ſame Nature, and differs only from a *Diabetes*, as an Infant from an old Man) which is very ſeldom attended with a *Thirſt*, at leaſt an intenſe and conſtant one: For as to the *Taſte* of the Water, it will be pretty near the ſame in both; only in deep *Diabetes's*, the urinary Juices have a ſenſible Sweetiſhneſs, being deprived of all its Salts, which remain behind in the Maſs. The Cure of a *Diabetes* is by all means to procure an Union between the *Grume* and the *Serum* of the Blood with the new *Chyle*, and to uſe only ſuch Food as is already form'd into the Nature and Conſiſtence of ſweet Blood; and therefore, in a deep *Diabetes*, a total Milk Diet is even more neceſſary than in the *Gout* or *Phthiſis*. *Chalky* Waters, (which may be readily known by their

their turning milky, upon forty or ſixty Drops of *Oil of Tartar per Deliquium* pour'd into a Pint of them) as thoſe of *Briſtol*, and the Lime Stone Water by *Bath*, and ſuch as no doubt may be found in many Places where there is Plenty of Lime-ſtone; *Hartſhorn* Drink with *Gum Arabic*; *Barley Water* with Syrup of Comfry, and all ſuch ſoft, cooling, *mucilaginous* Drinks, which give a Balſam and Union to the Parts of the Blood; a *Diet* of the ſame kind, *Milks* of all Sorts, ſoft Seeds, white young Meats, no *fermented* Liquors of any kind, and an Electuary of *Cinnabar*, *Bark*, *Rhubarb*, with the *Rob* of Elder, theſe, obſtinatly and rigorouſly perſiſted in, will at laſt ſweeten, balmify and unite the Parts of the *Blood*, in thoſe not far advanced in Life. But Errors in the *Nonnaturals* are here as fatal as in a *nervous Atrophy*, which conſtantly attends this Caſe; and I know no Diſeaſe but a *Phthiſis* that requires greater Strictneſs; and I have always obſerv'd, that here (as in all *Nervous*, *Scorbutic*, and *Arthritic* Caſes, when the Blood grows thinner, and the Diſtemper yields) there is a Scorbutic Raſh, a *Miliary Eruption*, or Cutaneous Foulneſs, appears all over the Habit; juſt as in a Fit of the Gout, or an Intermittent, Scorbutic Ulcers and Blotches riſe and appear in a State of Melioration of the Blood and Juices, when the Force and *Elaſticity* of the Solids

have

have got in ſome Degree the better of the Reſiſtance of the *viſcid Fluids*; and very often a Raſh, critical Ulcer, or Inflammatory or *Cutaneous Eruption*, unskilfully cur'd, ſtopp'd, or diſpell'd, has been the Cauſe of a ſubſequent *Diabetes*; when Nature deſign'd to throw out of the Habit the *Salts* and *Sulphurs* of the Blood, and, by untimely and ill-judg'd external Applications, the *peccant* Matter is thrown back on the Habit. So neceſſary it is to underſtand the *Animal Oeconomy*, to be an accompliſh'd *Surgeon*, much more to be a *Philoſophical Phyſician*.

Inflammation *in the Eyes, and the* Hæmorrhoids.

§. 20. *Inflammations* in the *Eyes*, eſpecially after the *Small Pox*, or in the *Hæmorrhoid* Veins, call'd the *Piles*, and univerſally all Kinds of Inflammations in whatever Part, (which I take to be one and the ſame Diſtemper on different Parts external or internal) are to be treated with frequent gentle *Phlebotomies*, till the Violence and Acuteneſs of the Pain ceaſes, with a total Abſtinence from all *Animal* Food, and fermented Liquors, cool Purges of the Salts with Manna, or the Lenitive or Diacaſſia Electuary, drinking plentifully ſweet Cow-Whey, or the Decoction of Quickſilver in Water; and for an extirpative Cure, and to cut off Returns, a long Courſe of *Æthiops* with *Crabs*

Crabs-eyes, (which is the beſt way to hinder the *Sulphur* in the *Æthiops* from gripeing or running into ſinking *Diarrhœa's* in tender Conſtitutions) and rigid Abſtinence from every thing that will heat, inflame or agitat too violently.

The Gout.

§. 21. The *Gout*, being alſo a violent *Inflammation*, firſt on the *Joints*, and then over the whole Habit, (ſhifting from Part to Part, till at laſt it fixes on the *Bowels*, and internal Parts) as much as an *Eryſipelas*, or the *Roſe*; is never to be greatly leſſened, much leſs *eradicated*, or extirpated, but by *Mercurials ſine Stimulo*, or their mild Preparations with *Gum Guaiac* and *Nitre* long continued, and a total Milk-diet, or Water-drinking, with the common animal Diet; perhaps this laſt alone may be ſufficient, early enter'd upon in good Conſtitutions, which will certainly leſſen and weaken all the after Fits, but will not extirpat the Diſtemper. All other Methods or Medicins to effect a total dureable *Cure*; all *Noſtrums*, *Specifics*, or Alteratives beſides, are mere *Trick*, or worſe, to cheat *Patients*, and deceive weak and credulous Perſons; for nothing but what will cure the moſt obſtinat and intimat of all *Inflammations*, or lixivious, *ſcorbutic* Habits, can relieve or cure the *Gout*. *Mercury* is mark'd out, and ſingled by the Appointment of the *God of*

Nature to attenuat, open, deterge, and diſſolve; and Milk and Water, and Seeds, to cool, nouriſh, and *balmify*; and both together are the only natural and neceſſary *Antidot* to obviat the *Cauſe* of the *Gout*. If an *Angel* ſhould propoſe any other Method, or Medicin, as Nature is now conſtituted, he ought not to be minded. *Vegetables* of the ſoft, juicy, mild Kind, ſuch as *Turneps*, *Potatoes*, *young Seeds* and *Plants*, and all much dreſs'd Garden-things, are much the ſame with *Milk*. But Milk and Bread alone is the only certain Remedy; about three Pints of Milk, and ſix Ounces of Bread in a Day. Thoſe who have not the Courage to purſue this Method, or find not any great Inconvenience from ſlight and regular *Fits*, may keep it ever ſo (or at leaſt till towards the *Decline* of Life) by a total Abſtinence from all fermented Liquors, except, perhaps, clear unhopt Small-beer, or this Diet-drink, which I prefer, from *Experience* in this Caſe, to all other Kinds of Beverage: Take of *Raſpings* of *Guaiac* Wood two Pounds, (or rather its *Bark* one Pound) a Pound *Loaf* of Bread much bak'd, hot from the *Oven*, a Pound of unbruis'd *Juniper-berries*, ſix *Seville Oranges*, roaſted and ſlic'd, and a Pound of deſputed Honey; put all theſe in a ſix-gallon Pipkin, and pour on them ſix Gallons of boiling Water, let them ſtand ſix Weeks in a warm Corner of a Room with a Fire; ſtrain them off through a fine Lawn on the

Cock

Cock into well-cork'd Bottles for conſtant Drink. This, as conſtant Drink, and white Meats for Dinner, with Milk Meats for Breakfaſt and Supper, and gentle Stomach-openers, as *Hiera Picra*, the *Pil. Ruffi*, or de *Aloe Iota*, or, which I prefer before theſe, the *Rheum Quinquinatum*, made with *Bark* one Ounce, *Rhubarb* two Ounces, two roaſted *Oranges*, *Juniper-berries* half an Ounce, *Snakeweed* and *Cochineal*, each a Drachm, in a full Quart, or thirty Ounces of White-wine, infus'd forty-eight Hours by a Kitchen Fire, ſtrain'd and filtred: Of which four Spoonfuls ſhould be taken at Night for a Doſe, two, three, or four times a Week in the Intervals of the *Fit*; this gently evacuats and yet keeps the Solids tight and firm, but ought to be taken and continued during the whole Intervals. All hot Things, high *Cordials*, and ſtrong either Meats or Drinks, (except when the *Gout* falls on the Stomach or Bowels) are adding Fuel to the Fire; and he that uſes them will as ſurely ſuffer in Proportion, as he that handles burning Coals, or hot Iron, will be burnt. As to Sulphur, or rather its *Flours*, I ſtill think it an excellent Remedy in the *Gout*, the moſt ſimple, ſafe and effectual of any, except the Method I have now deſcribed; as by its *Stypticity*, it conſtricts the Veſſels, and by its purging *Salt and Oil* lubricats and evacuats (for Sulphur is but *Salt* and *Oil*); and if a proper Regimen and due Exerciſe were added to it, I am per-

ſuaded it would do more in Time, than any one ſo ſimple a *Medicin* hitherto known, except *Quickſilver* and its milder Preparations, which, judiciouſly manag'd, I truly account the *Elixir Vitæ*, in this, and moſt *Chronical* Diſtempers; but here a cool, ſoft, ſpare Diet is *nine* Parts of *ten*; Medicin is only the other *tenth* Part. Gouty Perſons have always ſtrong Solids and Nerves, the Inflammation, Fever and Pain, and conſequent Abſtinence in the Fits, thins the Blood, and breaks the Coheſion of its Particles in every regular Fit; and hence the high Spirits of the Gouty in the Intervals, and their long Lives.

The Sciatic.

§. 22. The *Sciatic* is but the *Hip-Gout*, and, towards a laſting and dureable Cure, is to be treated in the ſame Manner, and by the ſame Medicins, mentioned for the *Gout*. But being in its firſt Stages often but Topical, and that in groſs *Cachectic* Habits, and ſcorbutic Conſtitutions, the ſharp *Serum* and viſcid Part of the Juices ſettles and gelatiniſes in the *Hip-Joints* or lower *Vertebræ*; and there being ſurrounded with bulky and thick Muſcles, and deep and large *Articulations*, becomes ſo fix'd and painful, as quite to diſable and confine the Patient, it may require a particular Attention. And in this Caſe I have never found any thing ſo effectual and ſpeedy as Pills made with *Alcaliſatus*, *boil'd Turpentine*, *Æthiops* and *Nitre*; theſe

theſe taken in a due Doſe twice a Day with *Bath* Waters, *Batheing*, and interſpers'd Purges of *Calomel*, have ſeldom failed in Time to effect a Cure, either by regular Fits of the *Gout* afterwards on the Extremities, or by a dureable Recovery from the Diſtemper. But to prevent Returns, the ſame Method and Medicins are to be uſed as in the regular and form'd *Gout*. Large Doſes of æthereal Oil of Turpentine with Honey, very often diſlodges it in a few Days; but this is extremely ſickening, and ſtrongly vomits, unleſs much diluted with weak Sack-whey.

Menstrual Obstructions.

§. 23. In *Obſtructions* of the *Menſes*, and all their ſlow Irregularities, I have never found any thing ſo effectual, (if there was not a deep *Cachexy*; tho' ſome Degree of one is always neceſſarily attendant on ſuch Irregularities, elſe they could not happen) as ſome of the mild *Mercurials* mixt with *Steel*, and the ſpecific *Emmenagogues*, together with *Aloetics*; as *Æthiops mineral*, the *Trochiſci* de *Myrrha*, and *Sal Martis* and *Extractum Quinquinæ* made into Pills; the *Alcaliſatus*, with the *Pilulæ Gummoſæ*, and the *Limatura Martis*, and the like; the firſt by attenuating the Juices, and opening the Obſtructions; the ſecond by balmifying and rendering them conſiſtent and uniform; and the laſt by giving a due *Tenſion* and *Elaſticity* to the *Fibres* and Coats of the Veſſels.

This Method, duly perſiſted in, fitted to the Patient, waſh'd down with *Bath* or *Spa* Waters, a Regimen, and due Exerciſe, will ſeldom fail, if interſperſed *mercurial* and *aloetic* Purges be join'd. *Rubigo Martis*, *Æthiops*, and *Aloe* made into Pills with the *Acidulæ*, do the ſame.

Floodings.

§ 24. In *Floodings* I know nothing like the *Bark*, *Eaton*'s *Styptic*, (which in this Caſe I prefer much to *Helvetius*'s, as being ſafer, cooler, and leſs rough and grateing) and the grumous Part of Sheep's Blood dry'd and powder'd, and apply'd plentifully both outwardly and inwardly. Every one knows the agglutinating Quality of *ſweet Blood*, and I apprehend it is to this, that *Eaton*'s *Styptic* owes its ſoft, mild, ſoldering Efficacy. *Steel Preparations*, even the mildeſt and moſt liquid, are more rough, harſh, and *cauſtic* here than is natural or fit for ſuch tender and delicat Parts; the other is more mild, ſubſtantial and ſoft, to patch a Hole, or glew up a *Rupture*, or to give a Balſam to the acrid and inflam'd flowing Blood of the Patient; and I am confirmed in this by a Phyſician of great Worth and Candour who has great Opportunities of dealing in ſuch Caſes by his *Practice of Midwifry*. The ſame *Method* and *Medicins* muſt be uſed in all *Hæmorrhages* external and internal from whatever

Part;

Part; for they are all of the ſame Nature, and from the ſame Cauſe, *viz.* an inflammatory *Craſe*, *Sharpneſs*, and *Size* of the Blood; and are ſeldom attended with any dangerous Conſequence in otherwiſe ſound Habits. But the beſt Medicins in the World will do nothing here without a cool, ſoft, *balſamic* Diet, of which I know *Milk* in this Caſe to be the very beſt and moſt *ſpecific*, as being Blood itſelf, only without the Colour, and ſo being endowed with the Quality of that very Medicin (Sheeps Blood) which I have mentioned as moſt *ſpecific* in ſuch Caſes; and I could venture my Life, that he who would live on *Milk* and *Seeds* only for ſome Time, ſhould not be much hurt, or long ſuffer, by any *Hæmorrhage*, unleſs ſome of the neceſſary Bowels were hurt deeply, eſpecially after premitting two or three, or more *Phlebotomies*, as the *Symptoms* indicat.

The WHITES.

§ 25. THE *Fluor albus* is only a Diſeaſe of *viſcid* Juices, and *relax'd* Solids, or of the *Sphincters* of theſe Paſſages, through which the *Menſes* paſs. By the wiſe Contrivance of Nature, the Cavity that receives the *Organs* peculiar to the *Sex*, is larger in the *Female* than the *Male*; the *Muſcles* are bigger, and the *Arteries* of a larger *Diameter*, and a greater Quantity of Blood is conveyed thither for the *Nutrition* of the *Fœtus* at the Time of Breeding, which at other Times ebbs and

flows monthly in healthy Females, to prevent a *Plethora*, and conſequent *Inflammation* or *Fever*. In Parturiency the *Fœtus* drains off this Superfluity; and hence the greater Health of delicate parturient Females, which never laſts longer, if not critically managed. For all the Operations of Nature, all the animal *Functions*, are tranſacted with *Regularity*, *Order*, and *Mechaniſm*. There are at laſt found viſible ſecretory *Organs* in *Fundo Uteri*, endow'd with proper *Sphincters* for this regular and *periodical* Secretion in the *Sex*; when the *Blood* is ſweet, and of a due *Fluidity*, the *Secretions* are made clean and free, and theſe *Sphincters* ſhut up cloſe, like thoſe of the *inteſtinal Secretion*; when the Blood becomes *viſcid*, or inflam'd, it weakens or relaxes theſe tender *Sphincters*, ſo that after the *grumous* Part, or the Blood *Globules*, is ſecreted, the morbid *Serum* continues to flow; and hence it is, that this Diſtemper is rarely, or ſcarce ever to be cur'd, but by a total Change of the whole Maſs; and this is the principal Cauſe of *Infertility* and *Abortion* in Perſons of Condition; for the *Fluor Albus* ariſes from ſmall Wounds or *Ulcuſcula* in *Fundo Uteri*, and muſt be treated accordingly: *Aſtringents* therefore may palliat it for a Time, but it will ever return. I know, from Reaſon and Experience, there is nothing ſufficient for a dureable *extirpative* Cure, but what will mend, attenuat,

nuat, and ſweeten the whole Maſs of the Juices, and brace and ſtrengthen the Solids; a total *Milk* and *Vegetable*, or *white Meat* Diet, Air, Exerciſe, with the mild *Mercurials* and Sweeteners, and then gentle Tighteners (Steel and Extract of the Bark) with cold Batheing, are alone ſufficient to perfect ſuch a Cure in delicat Conſtitutions in Time; and this Diſtemper generally afflicts the moſt lively, the moſt polite, and amiable of the *Sex*, and almoſt always makes them *infertile*. *Cinnabar* natural and factitious, *teſtaceous* Powders, *Extract* of the *Quinquina*, *Terra Japanica*, and the like, made into Powders or Pills, with Aſſes Milk, a cool Diet of the white Meats, and the weaker *Acidulæ* for Drink only, are what I have found moſt ſucceſsful. But few will have Patience and Perſeverance to go through with this tedious Cure, and very often by Neglect, or a *Mal-Regimen*, they turn *conſumptive*; for this Diſtemper being really internal, and from *Membranous Ulcuſcula*, will at laſt reach and affect the *Lungs* themſelves, and cauſe a *Phthiſis Pulmonum*, as generally, where theſe *Ulcuſcula* are very malignant, there are *Tubercles* alſo in the *Lungs* beginning, or *meſeraic ſcirrhous Glands*.

A Consumption.

§. 26. Next to *Hyſterics*, or *Nervous* Diſeaſes, a *Conſumption* is the moſt fatal and deſtructive Diſtemper that afflicts the Young and

and Delicat in this Iſland; and indeed there is ſuch a Connexion between high *Hyſterics* with Fits, and a *Phthiſis Pulmonum* with *Tubercles*, that they generally and naturally ſlide into one another; and both are the fatal Diſtempers, that afflict or deſtroy the nobleſt *Spirits*, and fineſt *Genius's*, of this Iſland, as every one who has been attentive muſt have obſerv'd: And I never once had Occaſion to attend to the whole Courſe of a *Conſumption* from Beginning to End, but I conſtantly obſerv'd, that high *Hyſterics*, and great *nervous Symptoms*, were the firſt Stage, or *Elements* of a *Phthiſis*. And I always foretold, that theſe Symptoms (eſpecially in tender, delicat, lively young Perſons) would terminat in a real ſenſible *Phthiſis Pulmonum*, if not prevented or remedied; and when the firſt nervous *Stage* of a *Conſumption* was not attended to, or not remedy'd, it was never to be cured afterwards in the following *Stages* or Degrees; and hence, to a thinking, reaſoning *Phyſician*, the Neceſſity of a low cool Regimen in *nervous* Caſes of any Degree, will be manifeſt. And a *Phthiſis Pulmonum* is no otherwiſe to be cured, or treated, than high *Hyſterics*, *viz.* in the firſt Stage by the mild *Mercurials*, with the volatil and fœtid *Gums*, or *Lucatellus's Balſam* made into Pills, or *Gum Ammoniac* malax'd with *Alcaliſatus*, *Æthiops*, *Cinnabar* native or factitious, or *Quick-*

ſilver

ſilver itſelf duly purg'd, *Aſſes Milk*, with the *Teſtacea*, a total *Milk* and *Seed Diet*, Air, Exerciſe, daily *Friction*, and cleanſing after with a coarſe Cloth dipp'd in cold or warm Water, according to the Seaſon. If this Method were timeouſly, rigidly, and obſtinatly perſiſted in, ſome of the nobleſt and brighteſt Spirits this Age or Country produces, might be preſerved. But it is ſeldom enter'd upon with any Exactneſs till it is too late, and the Diſtemper has got too deep a Root in *Tubercles*, *Ulcers* or *Ruptures* on the *Lungs*; and then a total Cure is not to be expected; a palliative one is all that can be pretended. In a Word, if *Hyſterics*, as well as a *Conſumption*, are not cured by the mentioned Method and Medicins, there is no Poſſibility of an extirpative Cure, or, indeed, any tolerable Degree of Eaſe, but by a total *Milk* and *Seed Diet*, with frequent interſpers'd gentle Emetics, which will infallibly cure totally, if any human Means poſſibly can.

JAUNDICE.

§. 27. A *Jaundice* is an Obſtruction in ſome of the Parts or Appendages of the *Liver*, or perhaps in its whole Subſtance, and generally either of the *Porus Biliarius*, the *Ductus Cholodochus*, or both; from a Viſcidity, Groſsneſs, or ill Condition of the *Bile*; or from bilious *Stones* and Concretions in the *Gall Bladder*

Bladder itſelf, from the ſame Cauſe. The *Bile* is a Liquor drawn out of the Blood, and elabour'd in the *Liver* to antidot the too great Abundance of too groſs, and too many *Salts*, and *Oils*, and *Sulphurs*, mixt in the Blood, thro' Intemperance and Exceſſes in too rich and too high Meats and Drinks. The Author of Nature wiſely foreſaw, that human Creatures would not always follow, and continue in the *Lighteſt* and the *Leaſt*, nor would be contented with *vegetable* Food, and plain Water, but would luſt after the Blood and the Fleſh of their Fellow-creatures, and wallow in fermented, ſtrong, and ſpirituous Liquors; and therefore, to antidot the ill Effects of ſuch a *Diet* for ſome Time, for a Trial of their Virtue, and to allow them the free Uſe of their Faculties for a Seaſon, intended the wonderful *Organ* the *Liver*, the largeſt, moſt complicated, and the moſt artificial in the whole *Machin*, to draw and elicit, as by an *Alembic* from the Blood and Juices, the moſt deleterious, and poiſonous Part of theſe high Meats and Drinks; and even to make the extracted *Bile* uſeful and neceſſary to concoct and purify the *Chyle* from ſuch ſtrong *Aliment*, and ſo of a real *Poiſon* to make an uſeful *Antidot*, at leaſt for a Time, and in Youth-hood. The higher the Food is, the larger the *Liver* neceſſarily grows; and at laſt even ſo big as to fill almoſt the whole Cavity of the *Abdomen*. The *Bile* not

not only gives a *Balſam*, *Union*, *Homogeneity*, and Conſiſtency to the various *Chyle*, but is the primary and moſt active *Stimulus* to the *periſtaltic* Motion, by which the Superfluities of the Food, and its groſſer indigeſtible Parts, are thrown out of the Body. In *Animals* that live on *Vegetables* and *Water* only, the *Bile* is only like ſtrong Elder *Vinegar*, or *Verjuice*, with a little *Animal* Oil; but in voluptuous Men it is like *Oil of Vitriol*, green, yellow and black ſucceſſively, and is the *ſecondary* Cauſe of all the *atrocious*, excruciating and fatal Diſtempers that afflict *Mortality*. A temporary *Jaundice* ſeldom fails to ſucceed on a violent Fit of the *Colic*, which *Colic* is owing to the diſtemper'd *Bile* thrown too plentifully on the ſmall, ſenſible, and tender *Guts*; where ſtagnating, it ſtops the *Biliary* Paſſages, and ſo muſt recoil on the Habit. I know not ſo ſpeedy and certain a Relief or Cure in a *Jaundice*, as frequent repeated active *Vomits*, which not only pump up the *Bile* collected in the *Primæ Viæ*, as it flows, and force off ſmall *Stones* ſtopping the *Porus Biliarius*, or lodg'd in the *Gall Bladder*, as I have ſeen frequent Vomits do, but likewiſe attenuat the Juices, and open the *Glands* of the *Liver* itſelf. Plenty of ſoft diluting *ſulphurous* Water (the *Bath* eſpecially) a thin, cool, liquid Diet of *Broths*, *Milks*, or *watery Seeds*, *Fomentations*, and *mercurial* ſoft *Plaiſters* on the afflicted Parts,

the

the Liver eſpecially, will moſt readily cool, relax and open; and ſince the Nature of the corrupted *Bile* comes neareſt to a *ſaponaceous* Solution, to ſupply its Place with Pills of *Alicant* Soap, *Quickſilver*, or *Æthiops*, *Salt* of *Wormwood*, and *Reſin of Jalap*; both to open, deterge, and ſweeten the Juices, and to ſcour and clear off the *Mucus* of the foul internal Coats of the Veſſels; great and ſtrong Doſes of Soap taken at once I have ſeen ſometimes ſucceed; but I think it has not been ſo much from its *ſpecific* Virtue, as the violent and repeated Vomitings it excites in ſome Conſtitutions. But as *Soap* (though the beſt artificial *Succedaneum* to vitiated *Bile*) is, to ſome, ſo nauſeous and ſickening in the Stomach, that they cannot bear it long enough to have its due Efficacy, I think the beſt and moſt effectual general Method in *Jaundices*, is *Vomits* often repeated, perhaps every three or four Days at firſt, *Rhubarb* and *Quickſilver* made into Pills with *balſamic Syrup*, waſh'd down with Barley Water acidulated with the Juice of Oranges, and ſweetened with Curran-Jelly, or with ſweet Cow or Orange-Whey, no fermented Liquor, but as a *Cordial* on Extremities, a Diet of Milk, Broth, or white Meats, Air, and Exerciſe as they can bear, a long Uſe of *ſulphurous* Waters, with Bathing in them, and the general Methods for ſweetening, attenuating, and opening Obſtructions.

ſtructions. I have ſeldom fail'd, if call'd in Time, by frequent *Vomits*, Pills with *Æthiops*, *Soap*, and *Salt* of *Wormwood* waſh'd down with Orange-Whey, and a very cool, low Diet, to bring about an extirpative Cure in Perſons of a tolerable Habit, not too far gone in Life.

The SCURVY.

§. 28. I CALL that a *Scurvy*, or a *ſcorbutic* Habit, when the Blood and Juices are much and throughly ſaturated with *ſaline* and *ſulphurous*, or *firy* Particles, with a thick *Buff*, or the Curd of a liveriſh Conſiſtence, a *yellow Serum*; whoſe *Symptoms* are generally an habitual white, or *foul-cruſted* Tongue, a large red *Brickduſt Sediment* in the Night-water, but with great Varieties; inſomuch that when the *Perſpiration* is ſtopp'd, or the *Animal Functions* labour, the Water is *pale*, *clear*, and *copious*, ſo as to ſeem to threaten a *Diabetes*, (and then the *Hyſteric* and *nervous Symptoms* follow quick) a Burning in the Hands and Feet, and a preceding Coldneſs or Chilneſs in them, *Blotches*, *Scales*, *Pimples*, or Heats over the Body, in the *Breaſt*, *Back*, *Thighs*, and *Peritonæum*, with frequent *bilious* Vomitings; the *Serum* of the Blood is ſometimes *ſaltiſh*, even to the Taſte, and its *Grume liveriſh*, viſcid, and coheſive, tho' perhaps without a viſible *Buff* on the Top; for then the Caſe is very bad

and

and far gone; the *Dejections* are various and uncertain, according to the Nature and Quantity of the Food, but rarely figur'd; interrupted and broken Sleep, and ſcarce any comfortable Refreſhment from it; often a *Thirſt* in the Morning, and on ſome ſtrong *Hawkings*, throwing up Bits of blackiſh or bluiſh *Phlegm*, after which they are eaſier for the Day, tho' ſcarce ever in perfect, placid, and ſerene Health, but always *reſtleſs*, *anxious*, *unconſtant*, *precipitat* and *paſſionat*; the *Liver* is then beginning to be faulty, obſtructed, or *ſcirrhous*; and this is the fundamental Diſtemper, the productive Cauſe, and, as it were, the *Baſe* of all the high *Hyſterical* and *Hypochondraical* Symptoms, of all the *Vapours*, *Lowneſs of Spirits*, *Flatulence*, *Spleen*, *Fits*, *Convulſions*, *Epilepſies and Apoplexies*, to which the People of Condition, of this various, watry, and turbulent *Climat*, are ſubject; and differ only according to the Frame, Age, and Manner of Living of the Perſon. All theſe *Symptoms* proceed from, and are cauſed by, viſcid Juices, ſaturated and over-ſtock'd with too many *ſaline*, *ſulphurous*, or *inflammatory* Particles, which firſt produce a Labour and Struggle of the *Circulation*, and obſtruct the *Perſpiration*, and then affect the *Viſcera*, by making Obſtructions in the *Lungs*, whence *Aſthma*, *Phthiſis* and *Pleuriſy*, or *Peripneumonia*; or in the *Liver*, *Spleen*, or *Peritonæum*, and thence

thence *Jaundice*, *Dropsy*, or the *incystated Glands* of the *Breast*, *Abdomen*, or *Mesentery*, become scirrhous; and lastly the universal *nervous System* is thereby affected, perhaps all at once, or sometimes one Part sooner than another, according to the original *Make*, and the Degree of the *Taint* communicated by the Parents, or the Materials of the Excesses. And therefore I never knew a more proper Designation of various oppress'd and anxious Distempers than *Scorbutico-nervose*, *viz.* those where no particular distinguishing *Symptom*, or sensibly corrupted and spoil'd *Bowel* above another, was yet discernible, so as to give them a Designation from such a State of corrupted, viscid, *saline* and *inflammatory* Juices, and pickled, broken and relax'd *Solids*. For a *palliative* Cure in its first Stages, and to keep the Distemper at a Bay, I know nothing so effectual as drinking sweet Cow-whey, especially in the Summer Months, chewing *Bark* freely in the Forenoon, to keep up a due *Tension* in the Solids, and *Rhubarb* at Night for the same Purpose; and at the same time to carry off the *Secretions* of the *Glands* of the *Alimentary Tube*, which always are discharged upon the Common-Sewer of the Body, *viz.* the *Intestines*, and to carry off likewise new-generated *Superfluity* and Fuel to the Distemper; a light white meat *trimming* Diet, little or no fermented Liquor, but small *Spruce New-England Beer*, or the *Gout Diet-drink* for-

merly mention'd, Air and Exerciſe, the Fleſh-bruſh uſed Morning and Night, to rub off the Salts and Scales, as they are ſecreted by the *perſpiratory Ducts*, and to allicit the Circulation towards the Surface; and conſtantly after waſhing the Body all over, and that ſtrongly and much, with a coarſe Towel dipp'd in Water, and drying with one well air'd; which is a true, but a more conſtant and uniform cold Batheing, without the Shock and Violence on Nature, from Plunging. But if this *Diſtemper* is come to great Heights, or advanced towards its laſt Stages, with high, acute and anxious *Symptoms*, ſo as to threaten an Alienation of the Faculties, inſupportable *Terrors* and *Panics*, total want of natural Reſt, *Fits*, *Convulſions*, or *Syncopes*; nothing will then do, but Milk and Vegetables, for Food; frequent *Vomits*, *Mercury*, only in its milder Preparations, applied and fitted to the *Caſe* and *Conſtitution* of the Patient; but in their moſt ſimple and natural Preparations; with repeated ſmall *Phlebotomies*, which gradually leſſen the *old briny Maſs*, and give Room for this ſweet and ſoft Supply, from the Diet, to enter the Habit; and with other proper Cleanſings of the Stomach and Bowels, by *Vomits*, *Rhubarb*, or *Aloe*, as the *Symptoms* indicat. I think this the ſhorteſt, ſafeſt and moſt effectual Method the Nature of Things, or the *animal Oeconomy*, will admit, in this univerſal and *epidemical* Diſtemper of *Britain* and *Ireland*, pointed out by Reaſon, and juſtified by

by Experience; few or none ever failing of a perfect Cure, or a notable Relief, in this Method at last, who have not the *Viscera* intirely destroyed, or have Time in the common Duration of Life for a total Cure; and even in that Case, the Pains and *Symptoms* will be less, than under any other Method and Medicins, the Time of their Dissolution will be prolong'd, and their Departure render'd less violent and torturing. Living on Milk and Vegetables, drinking sweet Cow-whey all the Summer Months yearly, will keep this Distemper long under, and at a Bay; all cooling, diluteing and thinning Foods will help it, particularly living much on *Lettuce* in the hot Weather, boiled or raw.

The Colic.

§. 29. The *Colic*, either in the *Stomach* or *Bowels*, is generally the Beginning of some other translateable or flitting severe *chronical* Distemper, *viz.* of the *Rheumatism*, the *Gout*, of *Hysteric Fits* and *Convulsions*, the *Jaundice*, *Palsy*, *Epilepsy*, or *Apoplexy*. A constant Heart-burning, sour or putrid Belching, (as of rotten Eggs) throwing up *green*, *yellow* or *black Choler*, are often its *Harbingers*; which, if not remedied, seldom fail to bring on violent Fits of the *Colic*; and all of them are produc'd by Excesses in the *Too-hot*, *Too-high*, or *Too-much*, in respect to the Constitution of the Party. The Blood and Blood-ves-

fels, the *Glands conglobat* and *conglomerat*, being then full of ill-condition'd Juices and Chyle, will no longer receive the daily new Recruits thereof, which ſtagnat and recoil on the *Chyliferous* Duct, where they firſt *acidulat*, and then *putrify*; and occaſion firſt theſe Heart-burnings, ſour and rotten Belching, and afterwards *bilious* Vomiting, Fits and Convulſions, by the Overflowing and ill Condition of the *Bile*. The common Diſtinction of *nervous* and *humorous*, or *bilious* Colics, I take to be founded only on the Difference of the Conſtitutions of the Subject; and they are not different in Nature, or ought to be differently treated, but in the *Doſes* of the ſame Medicines; for there is no Difference but in the Degrees of the ſame Subſtance, between the Vapour or Smoak ariſing from hot Water, and the Water itſelf. The *Cure* of the *Colic* lies in cleanſing the *Stomach*, as often as the *Symptoms* indicat, by repeated *Vomits*, and the Inteſtins by warm *Stomach* Purges; among which I prefer what I call the *Rheum Quinquinatum*, in this Caſe, *viz.* Bark, Rhubarb, Bitters, Aromatics, and roaſted Oranges infus'd in Wine; four Spoonfuls of this, or equal Parts of it with *Tinctura Sacra*, taken going to-bed every Night, or every other Night, or *pro re nata*; the Reaſons of this *Compoſition* will be evident from what has been already hinted. But, beſides, the

Patient

Patient muſt uſe a very moderat Diet of the common Food, and a total Abſtinence from *fermented* Liquors, and drink nothing but Toaſt and Water, *Bath*, *Spa*, or *Pyrmont* Water to his Meals. Many I have totally cured of habitual *Colics* by drinking nothing but Toaſt and Water tepid, eſpecially after firſt having cleanſed the Stomach and Bowels by a few Vomits, or ſome Doſes of the mentioned Mixture. What is here advanced, will equally ſerve in moſt or all of the Diſorders of the Stomach and Guts, or the *chyliferous Tube*, that do not depend on ſome *ſpecific* Diſorder in the Habit tranſlated upon them, ſuch as the *Rheumatiſm*, *cutaneous Defedations*, *Gout*, or *Scrophula*, whoſe Treatment has been already directed.

Venereal Distempers.

§. 30. I SHOULD here put down my Thoughts on *Venereal* Diſtempers, but that the late Treatiſe of *Chirac de Re Venerea* has made every thing that can poſſibly be ſaid on that Subject uſeleſs; he having treated it, and many other *chronical* Diſtempers united with, or akin to it, with a Juſtneſs, Fullneſs, yet with a Simplicity and Perſpicuity, that renders that Treatiſe one of the moſt uſeful Books in the Practice of *Phyſic*, that has appear'd ſince *Sydenham*'s Time. I ſhall here only take Notice of two things concerning this Diſtem-

per: 1°. That I cannot be of Opinion, that either the *ſmall* or the *great Pox*, was originally a Diſtemper peculiar and appropriated to any certain Time or Climat, or *endemial* any-where, no more than the *Itch*, *Leproſy*, or *Plague*. A particular *Air*, *Climat*, original *Frame*, *Manner* of Living, *epidemical* Vices, and the like, may vary the *Symptoms*, exaſperat and increaſe the Malignity and Degrees of one Diſtemper, called by ſuch a Name, more than another; as particular *Species* of Plants differ by *Culture*, *Sun*, and *Soil*; but that they ſhould alter the particular Nature and *Species* of a Diſtemper, by which it is diſtinguiſh'd from all others, I think, is unnatural, *unphiloſophical*, and abſurd. Diſeaſes have a general Nature and *Symptoms* from the Habitudes of the Patients, from the *Climat* and *Country*, the *Air* and *Food*; and they have a particular Nature from their *Seminium*; and they have Degrees or *Symptoms* from the Vices and original *Formation* of *Individuals*. I take the *Eſſence* of a *Venereal* Diſtemper to ariſe from the Nature of that particular *animal Salt* which abounds in the *Spermatic Organs*, and in the Subſtance therein generated; and, to ſpeak more explicitly, I take it to be a ſubtle, active and cauſtic *Alcali*, leſs ſublim'd and volatil than that which is the Cauſe of the *Peſtilence*, and infinitly more *fine* and volatil than our moſt perfect common *volatil animal Salts*. When *Lechery*, *Climat*,

Climat, *Naſtineſs*, and various *Commixtures*, a hot Diet, and Lazineſs, have co-operated and fermented to their Height, theſe *Salts* turn acrid and *cauſtic*, and ſo produce what is called the *Great Pox*: In leſſer Degrees it has weaker *Symptoms*, but has one general, adequat, and *ſpecific* Cauſe, *viz.* an Abundance and Exaltation of *cauſtic*, active *animal Salts*, actuating *ſpermatic* Subſtances of all kinds; but is envelop'd and ſheath'd with a ſoft mild Jelly, when innocuous; and to the Activity, *Stimulus*, and Titillation, of this *volatil Alcali*, *Lechery* and its Senſuality is owing. *Salts*, eſpecially *volatil Alcali's*, are the great Promoters of *Salacity*, as is evident in *Goats*, *Pigeons*, *Sparrows*, *&c.* And that which was the *Burning* in *England* ſome Ages ago, with all its Symptoms, was really the ſame in Kind, though not in Degree, with the *Haws* in *Ceylon*, only exaſperated and ſublim'd higher by the inoculated Ferment, from that particular *Iſland* and *Climat*; juſt as the *Leproſy* of the *Arabians* and *Greeks* is ſpecifically the ſame *Diſtemper* with the *Scurvy* and *Itch* of the *Germans*, and other *Northern* Nations; for the Difference of *Climat*, *Regimen*, and *Habitudes*, alter in ſome Degree the ſpecific Nature and Kind of Things. 2°. That a low, cool, very abſtemious, nay a total *Milk and vegetable Diet*, is as neceſſary and uſeful ſometimes, if not more, in *Venereal* Diſtempers, than in any other *Chronical* Diſeaſes

whatſoever; and if *Mercury*, and its Preparations, make not always a total, perfect, and laſting *Cure*, it is becauſe a *Regimen*, ſtrict and parſimonious, has not been added to it for a due Time, or that ſome of the noble *Organs*, or the intire Syſtem of the Solids, are putrified by it. 'Tis notorious, that the *Dutch* Mountebank *Ibra*, by no other Art but his Raiſins, and dry Bisket Diet, with a very ſlight and ſimple *Mercurial* Pill, *Guaiac Diet-drink*, and *Sweating*, cured *Venereal* Diſtempers, *nocturnal* Pains, and *carious* Bones, that had defeated the moſt effectual Medicins of the *College:* And a great *Admiral*, when he went into warm *Climats*, cured all his infected Sailors with tying them down to live on nothing but *Water-gruel* and *Cream* of *Tartar*, for *three* Weeks in the ſlighter Caſes, and for *ſix* Weeks in the deeper; and I am ſatisfy'd, a ſtrict, ſpare Milk and vegetable Diet, with no Drink but pure Element, a Decoction of the *Woods*, or *Spruce-Beer*, would cure, and carry it off as effectually, as it does other *Chronical Diſtempers:* But I readily own, that *Mercury* and its Preparations, and *Guaiac* and its Preparations, will quicken and facilitat the Cure one half: As to other Evacuations, I have no Opinion of them, but to drive the peccant Matter out of one Part of the *animal* Body to another more improper: And as *Mercury*, and its Preparations, with a low Diet, is the ſole Cure of the *Pox*, ſo it is of all other *Chronical* Diſeaſes whatſoever;

and

and if *Venereal* Diſtempers are now a weakening in their Malignity, as it is ſaid; it is becauſe the more frequent Uſe of *Mercury* has deſtroy'd the Force of that cauſtic Salt in its Sources, and thereby the *Acrimony* and *cauſtic* Nature of its *Seminium*, in thoſe who are generally the Propagators of it; *Mercury* and its Preparations being now uſed in moſt *chronical Diſtempers*.

§. 31. I SHOULD ſay ſomething here of the *Stone* and *Gravel*, but that ſince the ſucceſsful Experiments on Mrs. *Stephens*'s Medicin, and ſince it has been examin'd and approv'd of by the Members of the *College*, and its Efficacy explain'd and accounted for, from the Principles of the beſt natural *Philoſophy*, and its Form garbled and poliſh'd by two of the *worthieſt Men*, and moſt accurat Obſervers of this Age; all I can poſſibly ſuggeſt, can be of little Value or Uſe. Only ſince it has been ſurmis'd by ſome, and contradicted by none, that *vinous Beverage* quickens and promotes the Efficacy of the Medicins; I think myſelf obliged to ſay ſomething to this ſeeming *Objection* to one great Principle I have laid down (without Exception) in this Treatiſe, *viz.* That ſole Water-drinking, in all Caſes, is one of the ſureſt Means to preſerve or reſtore Health, and that ſtrong fermented Liquor, much leſs *vinous Beverage*, (except as a Medicin or a *Cordial* on *Extremities*) is not an Inſtitution of Nature, nor conducive to Health.

Health. That Mrs. *Stephens* did not adviſe *ſole* Water-drinking under her Medicin, but rather directed the contrary, is no great Wonder; it might have too much diſcouraged the Uſe of a Medicin, nauſeous in itſelf, and requir'd in large and frequent *Doſes*; and that the *Gentlemen* that have been at moſt Pains to diſcover its Nature and Efficacy, have ſaid nothing for or againſt ſole Water *Beverage* under it, might be for want of *Caſes*, where the Patients drank Water only under it, to make the proper Experiments by. The only Reaſon I have learn'd that is given for drinking Wine under it, is that thereby the *Urine* is render'd more *Alcalin*, and conſequently more efficacious to work on the *Stone*: But ſurely this would be too frivolous for ſuch ingenious and penetrating Gentlemen to offer as ſolid, and ſo could not come from them, they well knowing, that *fermented Menſtruums* rather deſtroy than promote the *Alcalin* Virtues of Medicins; for the ſame Quantity of *alcalious* Matter, impregnating an equal Quantity of an *aqueous* and a *vinous Menſtruum*, will render the firſt much more *alcalin* than the ſecond. Fermented Liquors harden and conſolidat the *alcalin* Particles, as we may obſerve from unſlak'd Lime, which will be much ſooner and more fully broken and diſſolv'd by a *watery* than by any fermented *Menſtruum*; and it is well known, that Water is the ſpecific Diſſolvent of all Salts. But

that,

that, in my Opinion, which ſhould totally diſcourage fermented Liquor Beverage under all *Lithontriptics*, is, that it is univerſally agreed, that *Stone* and *Gravel* owe their Origin and Cauſe ſolely to the *Tartar* or *Salts* of fermented Liquors, perhaps alſo to the *animal Salts* of high Food, either in Parents or Poſterity; and ſurely the Medicin would work the quicker on the *Stone*, at leaſt have leſs to do, while that which is the Cauſe of its Accretion were intirely remov'd: And the Phyſician *Dolæus*, tormented both with Gout and Stone, found a Milk Diet the beſt Cure for both, and adviſ'd it equally in both *. *Cyprianus*, who had cut fourteen hundred Patients for the *Stone*, affirm'd, that among all thoſe there was not *one* who drank any thing but ſmall ſmooth Ale, or aqueous Liquors only. They are ſcarce ever ſubject to it in the Eaſtern Countries, at leaſt the Natives, who drink little but Water †. I have had Patients under this Medicin for the *Stone*, much tormented with bloody Water, which Water-drinking only has intirely ſtopp'd, except on violent Motion; and which, on the drinking the *leaſt Wine*, has return'd, even without Motion. I have known *one*, who, before Mrs. *Stephens*'s Medicin was diſcover'd, was ſo violently tormented with the *Stone*, that he had ſent for

* See *Dolæus* on the Cure of the Gout by a Milk Diet.
† See *Kolben*'s Hiſtory of the *Cape*.

Mr.

Mr. *Cheſelden* to cut him, who finding him under ſo bad a Habit, durſt not attempt the Operation, but adviſ'd him to a low, cool, ſoft Regimen, and Barley-water-drinking, to mend his Conſtitution; whereby he ſoon became ſo eaſy in ſome time, that he thought no more of that painful and dangerous Operation. In a Word, it is my Opinion, in this, as I certainly know in all other painful and dangerous *Chronical* Diſtempers, that ſole Water or unfermented Liquor *Beverage*, under their proper medicinal *Antidots*, would much quicken and facilitat the Cure: In ſlighter and leſs atrocious Diſtempers, I can allow a little *compounding* the Matter, between *ſenſible* Pain and *ſenſual* Pleaſure, I ſay, in other milder Caſes; but in the *Stone* and *Gout*, I ſhould think, would not admit even this, becauſe here the Cauſe of the Diſtemper is increas'd and enrag'd by this fatal Indulgence.

§. 32. THE *Seminium*, *Elements* and *Principles* of *ſpecifically* different Diſtempers, are the ſeveral different Sorts of *Secretions* (their *ſpecific* Nature and Qualities, and the Figure and Laws of *Attraction* of their conſtituent *Particles*) made by the different *Glands* and Strainers of the *animal* Body. Thus the *Mucus*, Phlegm and viſcid *Serum* ſeparated by the *emunctory Glands* of the *Noſe*, *Throat*, *Windpipe*, *Lungs*, and *alimentary Tube*, deſign'd by Nature

Nature to ſheath, lubricat and preſerve the *Elaſticity* of theſe *Organs*, when viſcous, ſaltiſh, or morbid, I call the *Seminium*, or Principle of *Coughs*, *Aſthma's*, *Pleuriſies*, *Scirrhus's*, *Conſumptions*, &c. The *Bile*, when viſcid, vitiated and corroſive, I call the *Seed* and Principle of the *Scurvy*, *Jaundice*, *Colic*, *Dropſy*, hot and inflammatory *Ulcers*, and the *Cancer*. The *Serum* of the Blood, when thick, ſharp, urinous, and *cauſtic*, is the *Seminium* and Cauſe of the Rupture of the *Lymphatics*, of *cutaneous Defedations*, the *Leproſy*, *Small-pox*, an *Aſcites*, or Dropſy. The *perſpiratory* Matter, which, when a Perſon is healthy, ſteams freely from the whole *Surface*, (like the Smoak of Water from a boiling Pot) when the Blood becomes thick, ſizy, and viſcid, and its *Particles* not ſufficiently ſmall, nor duly broken and *fin'd*, by the *digeſtive* and concoctive *Organs*, and can paſs no more through the *Skin*, but is confin'd to, and recoils upon the *Habit* on the Bowels and Cavities, produces *Flatus*, *Anxieties*, *Depreſſions*, and Lowneſs of Spirit; and when it taints and ſpoils the *Viſcera*, it cauſes *Fits* and *Convulſions*, and all the Train of *nervous* Diſtempers. So the *Sperm* and *ſeminal* Subſtance, when the *ſpecific animal Salt*, which is the Cauſe of *Luſt* and *Lechery*, is high, hot and corroſive, through *Climat*, *Luxury*, *high Food*, *Lazineſs*, *Naſtineſs*, and *various Commixtures*, begets *Pains*, *Cor-*

Corroſions, Inflammations, Ulcers, and *phagedænous* Tumours on the tender and delicat Parts of *Generation* firſt; and at laſt ſpreads all over the Habit like a *Cancer* or *Plague*, and conſumes both Fleſh, Skin and Bones. Its Time of Appearance in any Country depends on the Degree of its Malignity, and it is called by new Names from its new *Symptoms*; and yet it is all that time but one and the ſame *ſpecific* Diſtemper, in various and different Symptoms and Degrees of Malignity. I think this the Cauſe of the *Great Pox*. For Diſtinction's ſake, I obſerve three Kinds or Degrees of *animal Salts* or *Spirits*, (though their Degree be infinit, as that of all Qualities) that which we call our common *animal Salt* or *Spirit*, as that of *Hartſhorn*, *Silk*, *Sal Armoniac*, and other *animal* Subſtances, which too are real *Cauſtics*; that which produces the *Plague*, which is the higheſt Exaltation, *Sublimation*, and as it were the laſt Diviſion and *Subtiliſation* of theſe *volatil animal Salts*; and that which produces the *Pox* and the *Cancer*, which is more coarſe and fix'd, and, as it were, a *Medium* between the other two, and may be therefore broken, melted and diſſolv'd by the fine *Globules* of *Mercury*, and conſtant Water *Beverage*. From all which it is evident, as well as from Reaſon and Experience, that a proper, ſimple, thin and cool Diet is *nine* Parts of *ten* of all that is real or ſucceſsful in *Phyſic*, and that Medicin is but the other *Tenth*,

Tenth, and that the *Author of Nature* has with infinit Wiſdom and Goodneſs, in a great meaſure, put our Health in our own Power, ſo that almoſt *Quiſque ſuæ Fortunæ & Sanitatis Faber*; eſpecially when the Children are not palpably ſuffering for the Sins of their Parents, as is the Caſe of all *hereditary Diſtempers*.

Chap. III.

An Answer *to moſt of the* Objections *againſt the* Efficacy *of a* low, *and of a* vegetable Diet, *directed for the Preſervation of* Health, *and Cure of* Diſtempers.

§. 1. SOME have objected, that by thus ſtrongly preſſing the *Lighteſt* and the *Leaſt*, and confidently affirming, that *Temperance* and *Abſtinence* have but one *Extreme*, the *Too-high* or *Too-much* in Food, I may ſeem to inſinuat, that a *total Abſtinence* may be the very beſt of all; or to think, that none ever hurt his *Health* by any Degree of Abſtinence whatſoever. And yet it is a well-known *Fact*, that many have actually died by an obſtinat Reſolution to take no Nouriſhment; and that from ſome violent Paſſion, as *Love* or *Grief*, *Revenge* or *Diſcontent*, ſome have pin'd away, and put an End to their Days; that

that by an obſtinat Neglect of due and proper Nouriſhment, the digeſtive *Organs* have in time acquir'd an *analeptic* or *paralytic* State, that they actually could digeſt nothing; or that by long Faſting and Abſtinence, the concocting *Ferment* or Juice in the *Stomach* and *Glands* has turn'd acrid or morbid, and mixing with the Blood, has corrupted and ſpoil'd the Juices, and caus'd *Diſeaſes*, and at laſt *Death*.

§. 2. THE Whole of this *Objection*, and ſuch-like, is mere vulgar Error, frivolous, and *unphiloſophical*. I am here inquireing what is the *Law* of Nature in Diet, not by what Cunning or Craft this *Law* may be eluded. The *Author* of Nature declares his *Will*, his *Laws*, his Orders in material or natural Things, in the animal *Oeconomy* particularly, by general Effects differing in certain Proportions, according to different Circumſtances; by placing us as it were between two *parallel Walls*, and *barring* us up either before or behind; and ſo it is then evidently his *Law* and Order, that we ſhould only go backward or forward, as the *Bar* happens to be put. He has put *Valves* or Stops in the *Arteries* that *open* towards the Surface of the Body, and *ſhut* towards the Heart; and therefore I ſay it is his Law and Order, intimated by *them*, that the Blood ſhould move forward towards the Surface of the Body, and not backward

to

to the Heart even in all *Animals*, (yet I know not, but by great *Intemperance* in ſtrong Liquors, even theſe *Valves* are ſometimes forc'd, and the Blood, by regorging on the Ventricles of the *Heart*, may there clott and harden, and thereby becomes the natural Cauſe of *Polypus*'s) but it is not ſo in the *Veins*.

§. 3. WHEN I ſay, that contrary to the Nature of ſome other *moral* Virtues, (whoſe Perfection lies in the *Middle* between both *Extremes*) *Abſtinence* has but one *Extreme*, the *Too-much* or *Too-high* in Food, I mean only, by a *ſtrong Figure*, to take off the crafty *Puzzle* thrown in by ſome, that Perſons may hurt their Healths, and endanger their Lives, by, ſay they, an ill-judg'd *Abſtinence*. The wiſe *Author* of Nature has barr'd up the *Too-little* or *Too-light*, with Pains and Sufferings ſo intenſe and excruciating, as ſtrongly declare, that it is not his *Law* and Order, that we ſhould perſiſt obſtinatly in them, but deſcend into that middling Quantity we are tolerably eaſy under. It is true, he has alſo barr'd up the *Too-high* and *Too-much* with Pains and Penalties, but they are neither ſo intenſe, nor ſo quickly fatal. The *Too-much* and *Too-high* will produce Diſeaſes in Proportion to their *Degrees* directly, but they neither kill ſo ſoon, nor torture ſo much, as obſtinat *Faſting* will, if it be poſſible to perſiſt in it naturally. It is certain, that *Self-preſervation* is an eſſential

Law of Nature; and yet from *Frenſy* and ſtrong Paſſions, we hear of its being defeated daily. We judge of the Nature, *Tribe* and Species of a *Plant* or *Animal*, by the faireſt and beſt, and not by *monſtrous* or accidental Productions in either *Extreme*; as this Death by Faſting implies a direct *Monſtruoſity*.

§. 4. When I adviſe therefore the *Lighteſt* and the *Leaſt*, I mean, To take regularly Something and Somewhat; for Nothing neither admits of Degrees nor Qualities. Suppoſe (to ſhew the Abſurdity) a Man took *half a Pound* of Bread and a *Pint* of Water three times a Day, what would be the Conſequence? The *Objector* thinks the Patient would certainly *die*; his concocting Juices would turn *acrid*, and ſo ſpoil his Blood, and thereby he would *pine*, and at laſt extinguiſh; and yet *Caſſian* * tells us, that the antient *Hermits* allow'd themſelves but a Pound (or even leſs) of Bread with Water in *Twenty-four* Hours; and moſt of them liv'd to an *Hundred*, ſome to an Hundred and Fifty, others to Two hundred Years, without Diſeaſes, and with great Serenity and Chearfulneſs. And Dr. *Barwick* tells us, in the Life of his Brother, who, in the late Civil Wars, had for many Years been confin'd in a low Room in the *Tower*, dureing the Uſurpation; that at the Time of his going in, he was under a

* *Vide* Caſſian's *Conferences*.

Phthiſis,

Phthiſis, *Atrophy*, and *Dyſcraſy*, and liv'd on Bread and Water only ſeveral Years there; and yet came out at the *Reſtoration*, ſleek, plump, and gay. Many ſuch Inſtances I could produce, but it would be loſt Labour.

§. 5. As to thoſe who have ſtarv'd themſelves to Death, to alleviat violent Pains, high and unnatural Paſſions, Diſcontent, or a *Tædium Vitæ*, they do not properly belong to the general State of *human Nature*, and ſo have no Place in a Diſquiſition about the general Laws of Nature in the Human *Species* concerning Diet. Their Faculties, with the material *Organs* belonging to them, muſt be ſpoil'd and diſtemper'd; they are *Lunatic* and out of their natural Senſes, (as all violent Paſſions are a temporary *Lunacy* and Madneſs) and are no more to be inſtanc'd againſt the Law and Order of Nature as to Diet, *viz.* the *Lighteſt* and the *Leaſt* Food a Man can be tolerably eaſy under, than *Self-murder* is an Inſtance againſt the great Law of *Self-preſervation*. If I might tell my own private Opinion, it is, that where-ever theſe violent *ſupernatural* Paſſions of *Love*, *Grief*, *Revenge*, or Diſcontent, happen to ſuch a Height, there is a deep *Cacochymy* there already; that the Juices are already inflamed or putrified, *acrimonious* or *arſenic*, and that the Solids and intellectual *Organs* are ſpoiled, relaxed or putrified, and diſobe-

dient to the *Will*, and rational Spirit; and either diſſonantly play, and make a confus'd Diſcord, or poſſibly may be play'd upon by ſome foreign Spirit, like the *Obſeſs'd*; which in this *Dyſcraſy* finds a proper *Organ* for its malicious Inſpiration, as *Inſects* or *Vermin* plant their Eggs on the Leaves of *morbid* Trees; but at leaſt the Spirit, as well as the Body, muſt firſt be greatly diſtemper'd. But theſe laſt Solutions may be mere Conjectures, and as ſuch I only mention them.

§. 6. BUT the moſt whimſical and unphiloſophical Part of this Objection, is, that the *Archæus*, as ſome term it, or (which is the ſame thing) the inexplicable *Ferment*, in the *Stomach* and *Glands*, turning *acrid* and *arſenic* by Faſting, corrupts the Blood, and ſo cauſes Diſeaſes and Death; which is merely to ſubſtitute *ſomething* or *any thing* to ſupply the Void Ignorance has made, and thus *every thing* may be concluded from *any thing*. The true *Fact*, I think, is this: The wiſe *Author* of Nature has, by his own omnipotent Hand, originally and primarily form'd the *infiniteſimal Solids* of all *Plants* and *Animals*; neither lifeleſs Nature, nor Matter and Mechaniſm, with all its Laws, being capable to frame the leaſt original *Organ* or *Fibre* of either, as may be ſtrictly demonſtrated. It is certain from the Expences

of

of Living, Action, and the Secretions, the Blood, but especially the new Bile, if not recruited, diluted and cool'd, with fresh *Chyle*, and aqueous Fluids, in some Degree, would turn hot, viscous and thick, and so produce Diseases of all kinds; but then Water-gruel, Milk, and Garden-stuff, would be the very best and most effectual to prevent all these Inconveniencies, and keep it always cool, sweet, and fluid; and of these there is no Measure needs be put, but by Calls of the Appetite, unless the Party be ill and disease'd: For, by a necessary *Mechanism*, the animal *Fibres* and *Tubes* are set a playing, to take in Nourishment, and Materials for *Accretion*, *Evolution*, and *Extension*, from any Fluid or Juice next to them, whether good, bad, or indifferent; and thus grow and extend, as far as their original *Stamina* admit; after which they harden, fix and stop, the Juices thicken, and the *Vegetable* or *Animal* naturally and necessarily dies, and turns into Dust: And this is all that *digestive* or concoctive Powers can do; they can only suck in by their *attractive* Powers, and by their *mechanic* Powers grind and comminute the Materials neareſt the Orifices of their *Lacteals* and *Vasa inhalantia*, to fit them to plump up and extend these original *linear Solids*, till they arrive at their utmost Extension and Growth; and this they will do from their own *inherent* original *Elasticity* and *Attraction*, directed by the

Action and Influence of the *immaterial ſelf-motive Spirit*, that governs and moves all the *Organs* and *Functions* of this *elaſtic* Machin; ſo that, like the *Root* of a *Plant*, the *Animal* is fed or nouriſh'd by a watery Mucilage, or the neareſt fluid Mixture, whatever that be; as is evident from hence, that our Bodies may be fed and ſuſtain'd by *Clyſters*, *Fomentations*, *Injections*, *Tranſfuſions*, and even *Steams* and Vapours, as really, though not ſo fully and dureably, as by the Mouth and digeſtive *Organs*, without any *Archæus* or *Ferment*. All depends on the original *Elaſticity* and *Attraction* of the Solids, and the Direction and Superintendence of the *immaterial* indwelling *Spirit*; and any fluid Mixture will do, that lies neareſt; but what will moſt eaſily grind and divide, is fitteſt and beſt. It is true, as has been ſaid, to keep the Blood cool and thin, and to have the Health the beſt it may be, regular Supplies of freſh *Chyle* are neceſſary; but *Water*, *Milk*, *Seeds*, *Fruit* and *Vegetables*, will do that beſt of any.

§. 7. One favourite and ſpecious *Objection*, made by ſome *unphiloſophical* Perſons, againſt a low, cool *Diet*, is the Danger thereby from the over-abounding either of the too *alcalious*, too ſweet and ſoft Juices, or the too *ſharp* and ſour ones; *one* or *other* of which, they ſay, Seeds and Vegetables may produce, and into

into one of which, in their Opinion, they are naturally apt to run; at firſt into the *Too-ſweet*, and at laſt *Too-ſharp*, and both in their Turns. But the Experiments aſſign'd for Proof of this Objection are far from being deciſive of the true Cauſe in the Caſes objected, *viz.* that ſuch and ſuch Diſeaſes are relieved or cured by *Acids*, or *alcalious* Medicins *reſpectively*, becauſe, forſooth, Acids in the Air, and in the Mixture of *chymical* Liquors, deſtroy *Alkali's*, and on the contrary. Now I would deſire thoſe Gentlemen to conſider, 1°. That there is no manner of Certainty, that *Acids*, or *alcaline Salts*, can operate in the *capillary* Veſſels of living animal Bodies, after the ſame manner as they do in the open Air, and at perfect Liberty; becauſe their Operation is and muſt be obſtructed, or much altered, by the *attracting* Sides of the ſlender *Tubes*, (as we ſee in *Mercury* and Water in ſmall glaſs *Tubes*) and by the conſtant Motion of the Particles of *animal* Fluids in the *Circulation*; whereas *Reſt* is an indiſpenſable *Condition* towards the free and full *Action* of the innate Laws, and the Properties of *minute* Bodies. 2°. It is a great Doubt with me, whether there be in Nature, antecedent to the *Tortures* of the *Fire*, (natural or artificial) any true, at leaſt perfect *Alcali's*. I am ſure the Appearances (*viz.* their *Fermentation* with *Acids*) may be more *philoſophically* accounted for otherwiſe, *viz.*

from their *ſpecific* Gravity and *Attraction*, which are certainly their moſt *active* Principles, and likelieſt to produce the *Appearances* under Conſideration: And the *Figures* of the two different Kinds of Particles muſt greatly partake in the Effect, *viz.* from the *Particles* of the *Acids* being probably *triangular*, and highly *attractive*, and thoſe of *Alkali's* being porous *Calx's*, whereby the ſharp Points of the Acids will be ſheathed or blunted in the Pores of the *Alkali's*; for though Nature, by the ſimpleſt Cauſes, produces various and ſurpriſing Effects, yet the infinitly wiſe *Author* of *Nature*, being here confined by the *Eſſence* of that Matter, which he has made, to ſome *Figure* inſeparable even from the leaſt Particles of Matter, no doubt would chuſe the fitteſt, of which theſe two mentioned ſeem the beſt contrived. 3°. I could never conceive, that Health and the Cure of Diſeaſes (being ſo neceſſary a Qualification for all the wiſe Ends and Purpoſes, for which an *infinitly wiſe Being* could ſend his *Creatures* hither) could ever make them depend upon the Subtleties and Dreams of *Pyrotechnical Enthuſiaſts*, or the Tortures of *Chymical* Fires. I allow *Chymiſtry* one of the fitteſt and nobleſt *Inſtruments* to diſcover *analytically* the Nature, internal Compoſition, the *Laws*, *Size*, and *Figures*, of the component Particles of Bodies, as far as it can go; and ſo to be of noble Uſe in *Natural Philo-*

Philoſophy: But for *Medicin*, and the *Cure* of bodily Diſtempers, there is ſcarce a valuable Compoſition diſcovered by *Chymiſts*, that by long Experience and Obſervation, I could *prefer* or equal to the ſimple Products of Nature, when judiciouſly and experimentally choſen and treated. But, 4°. The true Cauſe of the Diſtempers here ſaid to be produced by the *alcalious* State of the Juices, and cured by *Acids*, and on the contrary; was the tender *Craſe* of the too viſcid Blood and Juices, produced by the *Too-much* of Food, *viz.* by more than the Waſtes of Living, or the Expences of the natural Functions, required; *Acids* then, by conſtringing and vellicating the Solids, (which is their natural and neceſſary Effect) increaſing their *Spring* and Action, (as we wind up the *Spring* of a *Watch* to make it go faſter) and ſo accelerating the natural *Functions*, whereby greater Diſcharges were made, and all the *Digeſtions* (firſt and ſecond) became more perfect; rendered the Juices more fluid, and the Functions more eaſy and natural. But I even doubt of the *Facts* and *Cures* alleged in this Objection; for Nature often *ſaves* and cures in time, when Art cannot kill. But I think the whole Doctrine of *Acids* and *Alcali's* in the *medical Ætiology*, a mere *Pyrotechnical* Romance, eſpecially in the Cauſe and Cure of Diſeaſes without the

Bounds

Bounds of the *Primæ Viæ*, as the ingenious Dr. *Pitcairne* has demonſtrated in his Tracts.

§. 8. ANOTHER great Complaint againſt a *low Diet*, *vegetable* Food, Milk and Milk-meats, and all Legums, Herbs and Fruits, is, that in theſe our *Northern* Climats they are windy, flatulent and tumifying, creating inſupportable *Hurricanes* and Convulſions in the *Stomach* and *Bowels* of ſome Perſons. I grant that where the Stomach is hot and inflamed by *high* Meats and Drinks, and the Bowels loaded with *Choler*, *Phlegm*, and *Wind*, theſe *Symptoms* indeed at firſt may happen; but that is only from the former *Diet* and *Mal-Regimen*. No Food can be had on the Globe without Wind, that is, without *elaſtic* or *unelaſtic*, *i. e.* fixed *Air*, ſhut up and inclos'd in its Subſtance; *Air* being a Part of its original Compoſition. In ſound Bodies, and clean Conſtitutions, this *Air* is evaporated and thrown off by the Perſpiration; for which End that Infinity of *perſpiratory Ducts* all over the internal and external Surface of the Body is deſign'd; ſo when the Body is in a good State, and thoſe *Ducts* are *pervious*, when the Digeſtions are good, and the Food ſufficiently *ground* and comminuted, and the *Wind* ſet free, it paſſes without the leaſt ſenſible Obſervation, Trouble or Inconveniency, by *Perſpiration*, like Smoak

Smoak out of a *Chimney*; but when the Food is but *groſly* digeſted, and the *perſpiratory Ducts* ſtopp'd by the Groſſneſs of its *Particles*, then the included *Air* is long retained and accumulated in the Body, as by a foul *Chimney* the Room is choaked with *Smoak*; and this is the true Caſe in moſt *chronical* and all *nervous* Diſtempers. But then there is a great Difference between the Pain ariſing from the *Windineſs* of *high animal* Food, and *ſtrong* Liquors, the *Torture*, *Panic* and *Convulſions* they produce at laſt, and the *Wind* of *vegetable* Food, as is between a freezing *North-eaſt Wind*, and a warm *Weſtern Breeze*; the firſt being compoſed of pointed *animal Salts*, and burning *Oils* and *Spirits*, and the laſt only of cool ſimple Air, Earth and Water. But in theſe laſt, the *Windineſs* and *Flatulency* may be greatly leſſened by *much* and *well* boiling or bakeing; culinary Heat, in all Inſtances, when judiciouſly applied, having the ſame Effect as the Heat of the *Sun*, as is evident from *infinit Experiments*; and the Parts of *Vegetables* being more eaſily diſſolved and divided into their *integral Particles*, the *preſpiratory* and flatulent Subſtance will more eaſily paſs through them. Boiled *Milk*, and ground *Seeds*, are not ſubjected to this Incommodity, and roaſted Fruits very little. But indeed the *Objection* will only take place at *firſt*, when the *Luxurious* are but juſt changing their *Regimen*, or are

grown

grown old. A little Patience and Perſeverance in the Endeavour after the *Lighteſt* and the *Leaſt* will fully anſwer this *Objection:* But a *vegetable* Diet is what I never recommend, but in very bad Caſes, and when Water-drinking under an *animal* Diet has not been able to make a Cure, nor greatly to relieve, and that even under this Reſtriction the Patient continues extremely miſerable: Tho', I think, Milk and Seeds, in all Caſes, will do all that Art can.

§. 9. WEAK and fearful *Patients*, and unexperienced *Phyſicians*, have been much frightened and terrified upon an *Intermittent Fever's* ſometimes ſupervening on a low *Vegetable or Milk Diet*, entered upon for the *Cure* of *Hyſterics*, *Convulſions*, *epileptic Fits*, *nervous Lowneſſes*, the *Gout*, or the firſt Stage of a *Phthiſis*. The *Phyſician* adviſing has been blamed, and the *Patient* diſcouraged and frighted, ſo as to drop the *Regimen* and Method, and has therefore ever after lived a *dying*, *melancholy* and miſerable Life; and ſome have been forced to throw themſelves into the Hands of *Quacks*, and on deſtructive, deleterious *Noſtrums*, for a ſmall tranſitory preſent Relief; and of this I have ſeen ſome Inſtances, of which a few have happen'd in my own Practice, and in Caſes at firſt under my own Direction. This is a melancholy Degree of *Infatuation* and Ignorance both in the *Patients* and *Phyſicians*; and not

to

to be accounted for, but in the unſearchable Wiſdom and *Secrets* of *Providence*, as happening (I have known) to ſome of the beſt and moſt amiable Perſons. But in the Name of Wonder and Aſtoniſhment, can a low, cool, balſamic *Diet* kill or create Diſtempers? while it is plain to a *Demonſtration*, that it is only the *too-high* Diet, and Food not fitted to the Conſtitution and Diſeaſes, that produce all the *bodily* Miſeries and Sufferings of Mankind. The Matter of Fact and Truth is, when the *Glands* and *Capillaries* are obſtructed, and the Juices are greatly corrupted and ſpoiled by a *Viſcidity* in the *grumous*, and a *lixivial Acrimony* in the *ſerous* Part of the Blood, its Reſiſtance is ſo great in the Veſſels, that the natural Force and *Elaſticity* of the *Heart* and Solids is not able to ſurmount it; and ſo all the Circulation is terminated in the larger Arteries and *Trunk* Veſſels, or the greater Branches of ſuch of them as juſt enter and terminat in the *Viſcera*, or internal *Membranes* and Surfaces. And hence grievous oppreſſive *Symptoms*, great *Anxiety*, and Labour in the *animal Functions:* And from theſe, obſtructed *Viſcera*, a deep *Melancholy* and Sinking, or a beginning Inflammation or *Gangrene* on the Bowels and noble Parts; and thence again *Convulſions*, *epileptic Fits*, conſtant *Hyſterics*, a *Jaundice* or *Dropſy*, and the laſt Stages of mortal Diſtempers daily happen. A *low Diet* and *deobſtruent Medicins* are adviſed; and in ſome time

the Juices by them are much diſſolv'd, thinn'd, and broken, ſome of the *Viſcera* and Obſtructions are looſen'd, and the *Diſproportion* between the *Reſiſtance* of the Fluids and the *motive* Force of the Solids is leſſen'd in them; the *Circulation* is render'd more extenſive, and paſſes now from the *Arteries* into the *Veins*; in many Arteries and Veins through their whole Length, if not moſt of their meeting *Capillaries*, which before could not be perform'd, or but partially and with much Labour. And now the *Symptoms* change their Appearance, and inſtead of the mention'd ones, either an *Intermittent*, a regular *Fit* of the *Gout*, (as happen'd to myſelf, the firſt time I ever had it, after I had been two Years under a total *Milk* and *Vegetable* Diet) a *ſcorbutic* Itch, *miliary* Eruptions, *Blotches*, or ſmall Ulcers deſpumat over the Body; and colical Gripes, bilious Vomiting, or the like, may be brought on. The ignorant and unexperienc'd *Phyſician* is puzzled; and the poor Patient terrified, and returns to a *high Diet* of *animal Food*, and ſtrong fermented Liquors, which fixes and perpetuats theſe Diſorders; and ſo the former *Regimen* and Medicins are condemn'd and *laid aſide*; whereas theſe *Symptoms* were the infallible Evidences of its Fitneſs and Efficacy; the Juices and Solids by them deſpumating, and throwing off on the Extremities their *Recrements* and Impurities. For every one that is acquainted with the

Animal

Animal Oeconomy knows, that an *Intermittent*, or any *periodical* Diſtemper, is nothing but the Struggle and Labour of Nature, to paſs the too viſcid Juices through the *capillary Arteries* into the *capillary Veins*; which ſhews a much greater Degree of Fluidity and Sweetneſs in the Blood, than when it cannot get further than the *Trunks*, and greater lateral Branches, and ſo reſts in the *Viſcera*, and internal *Membranes*, as it always does in the laſt Stages of theſe mention'd Diſtempers. The ſame Reaſoning is applicable to the *Gout* and *ſcorbutic Blotches*, both which are Signs of mending and purifying Juices; and conſequently Perſeverance in the ſame *Regimen* and Medicins muſt at laſt perform an *extirpative* dureable *Cure*, and perfect Health and Spirits, if any thing can poſſibly do it; whereas by returning to a *high Diet*, the Solids by the Diet being now more weaken'd and relax'd, and brought into a Balance with the *Diet*, and all the bad *Symptoms* exaſperated, muſt infallibly end in *Death*, or at leaſt in a wretched *dying Life*.

§ 10. Let *two* People be taken as nearly alike as the Diverſity and *Individuation* of Nature will admit, of the ſame *Age*, *Stature*, *Complexion*, and *Strength* of Body, and under the ſame *chronical* Diſtemper, and I am willing to take the ſeeming worſe of the two; let all the moſt promiſing *Noſtrums*, *Drops*, *Drugs*,

Drugs, and *Medicins*, known among the learned and experienced *Phyſicians*, antient or modern, regular *Phyſicians* or *Quacks*, be adminiſtered to the beſt of the two, by any *Profeſſor* at home or abroad; and I will manage my Patient with only a few naturally indicated and proper *Evacuations*, and *ſweetening* innocent Alteratives, which ſhall neither be loathſome, various, nor complicated, and require no Confinement, under an *appropriated Diet*, or, in a Word, under the *Lighteſt* and the *Leaſt*, or at worſt under a Milk and Seed Diet; and I will venture *Reputation* and *Life*, that my Method cures ſooner, more perfectly and dureably, is much more eaſily and pleaſantly paſs'd through, in a ſhorter Time, and with leſs Danger of a Relapſe, than the other, with all the Aſſiſtance of *Art*, *Skill*, and *Experience*, under a full and free, though even a commonly reputed moderat Diet, but of rich Foods, and generous Liquors, much more under a voluptuous Diet.

§. 11. COUNTRY Apothecaries, ignorant Practitioners, much more commonly, *Quacks*, who never dare order a *Regimen*, and who are continually cramming their Patients with nauſeous and loathſome *Potions*, *Pills* and *Bolus's*, *Electuaries*, *Powders* and *Juleps*, and plaiſtering every *Pore* of their Bodies, and at the ſame time incourage or allow them

to

to ſatiat themſelves with all kinds of toothſome and palatable Meats and Drinks, what do they but roaſt ſuch Patients alive? I have known and heard of many ſenſible Patients, who in ſome acute Diſtempers, and where they could not think and chuſe for themſelves, after they had recover'd by the Strength of their Conſtitution, have declar'd, that they have ſuffer'd more from the *nauſeous Medicins*, than from their *Diſtemper*. And ſome of the *Learned* I have heard give as a Reaſon for encourageing their Patients in ſwallowing whatever they can get down of *poignant* Food, that Nature had provided many *Out-lets* and Paſſages for *Superfluity* and *Cramming*. Suppoſing this *Fact* of the Indulgence of the *Author* of *Nature* were true, yet is it not Madneſs and Arrogance thus to abuſe it? Would it not be more prudent not to abuſe the Bounty of *Nature* in Contradiction to *Nature?* Not to *thruſt* down, than to be forced to *throw* off again? Not to *poiſon*, than to have recourſe to an *Antidot?* But the Truth of the Matter is juſt the *Reverſe: Nature* has indeed provided many *Out-lets*, as by *Perſpiration*, *Vomiting*, a *Looſeneſs*, *Sweating*, *Coughing*, and many other Secretions: But theſe, it neceſſary, are all perform'd in the beſt, eaſieſt, and pleaſanteſt manner, under the *Lighteſt* and the *Leaſt:* Whereas on *Cramming*, *Luxury*, high Living, moſt if not all of theſe *Out-lets* are ſhut and ob-

ſtructed, or the Diſcharge by them made with Violence and Pain, and hence only Sickneſs and Diſeaſes proceed; ſo that the *Argument* brought in favour of *Luxury*, is a very ſtrong and ſolid one againſt it.

§. 12. SOME alſo have affirm'd, that nothing but *ſolid* Food can nouriſh, and that *Broths*, *Soups*, *Milk*, and ſuch aqueous Food, weaken, waſte and liquify the Conſtitution and Habit. But theſe are poor *Philoſophers*; for in Truth and Reality, no Food can nouriſh, *i. e.* increaſe the Quantity of the Fleſh and Blood, ſupply the Waſte of Action and Living, and the neceſſary *Secretions*, but what is liquid and extremely thin; and *Whey* will nouriſh more quickly than *Beef* *, though not ſo durably, as is well known to every one who underſtands the *Animal Oeconomy*. Let one ſwallow down what he will, that Part of it which nouriſhes, muſt be thinner and more fluid than the *Whey* of Aſs's Milk; nay poſſibly as thin as a *Vapour*, elſe it can never enter the *Lacteals*, (the only Paſſages by which Nouriſhment or new *Chyle* can get into the Blood) or at leaſt paſs through ſome of the extremely minute *Canals* much leſs than a *Hair:* The reſt only ſcratches the Palate, and the *Organs* of Senſe, and *poiſons* the World afterwards. This is ſo certain, that it

* *Vide* P. 1. Chap. I, *towards the End.*

is

is with the utmoſt Difficulty the *Lacteals* can be injected with the thinneſt tinged Liquors, ſo as to be made viſible; and ſome of the very beſt *Phyſicians* and *Philoſophers* have thought, that they have no patent Orifices into the Guts, but that the *Chyle* is ſtrain'd through the Subſtance and Coats of the Guts, into theſe inviſible *Tubes*, like *Quickſilver* through Chamois, or Oil through Paper *. But let it be obſerved once for all, that I ſpeak not here of what is neceſſary to procure *brutal* or *mechanical* Force or Strength; but for the Diſeaſed, the Weak and Tender, and thoſe who only want clear Heads, free Spirits, and Freedom from Pain or Oppreſſion; for *high* Meats and Drinks I own neceſſary for the *Laborious*, the *Strong*, and the *healthy Young*, if taken with Moderation.

§. 13. That there are Inſtances of ſome Men who have lived to a great Age, under a great Fullneſs, and what in others is commonly reckon'd *Intemperance* and Exceſs, both in ſtrong, rank *animal* Food, and *fermented* Liquors; nay, of ſome who have gone on to *Fourſcore*, and ſuffer'd very little, though almoſt daily intoxicated with *Spirits*, and Liquors that have paſs'd through the *Tortures* of the *Fire*; that there have been ſuch *thoughtleſs Mortals*, I will not deny: But

* *Vide* Berger. de Natur. Human.

ſuch Inſtances are of no more Weight againſt what I advance, *viz.* that the ſhorteſt and moſt infallible Means to prolong Life, to preſerve Health, *Freedom* from Diſeaſes, and *Freedom* of Spirits, is to take down conſtantly the *Lighteſt* and the *Leaſt* Food a Man can be eaſy under, or a conſtant Endeavour after the *Too-little*; than the *Life* of an *Elephant* or *Roebuck* (ſome of which have been ſaid to live Four, Five, or Six hundred Years) is longer than that of a *Lap-dog*; or that the Lives of the *Antediluvians* were longer than *ours*. The *Wiſdom*, the *Art*, and *Perfection* of *Phyſic*, is to make a Man live chearful and eaſy, without Pain or Diſeaſe, with the Uſe of his *Senſes* and *Faculties*, and at laſt diſſolve without lingering Pain, when he has lived as long as *Nature* fram'd him to laſt. *London Houſes* are made to laſt Fifty Years, *Country Houſes* for Five hundred. With ſome the common way of dealing with their *Patients*, is conſtantly to blow the Fire, as with a Pair of *Smith's Bellows*, till they blow it *out*, or in a few Blaſts conſume it to *Aſhes*. The *Method* I would inſinuat, is to take out the *Aſhes*, and *dead Coals*, keep it open, and give it Air; and then it will *burn* chearfully as long as the Nature of the *Materials* will allow. One long-liv'd *Glutton* or *Drunkard* kills more by his Example, and the flattering Hopes, thoſe who know not their own Strength, and what they

they were made to bear, entertain, than *Hippocrates* ever saved.

§. 14. ANOTHER great and formidable *Puzzle* against a *low* Diet, in the *Gout* especially, is, that some have grown worse under it, and have been ever after declining; and some have actually died, after they had enter'd into this *Regimen*; and therefore some weak Dealers in *Physic* rail against it, pretending Experience and Observation for their Justification. I would ask these *Gentlemen*, Is it from the Nature and *Essence* of the *Diet* that this Misfortune happen'd? This they will not care to say, since *nine* Parts in *ten* of the Mass of Mankind, who follow this Diet, do well, and are free from the *Gout*. Is it then from the Nature of the Distemper? This they dare not say neither; for a low *Diet* is the proper *Antidot* to Inflammation, in which the *Essence* of the *Gout* consists. Nay, but, say they, the *Inflammation* of the *Gout* is on the Limbs and Extremities, and a cool Diet will draw it upon the *Viscera* and *noble Parts*. Allowing this its whole *Force*, it is only an Argument for warmer and more generous Medicins while the *Fit* lasts; and it is in the Intervals that a *low Diet* is chiefly recommended to lessen the future *Inflammation*; and after all, I much doubt, even when it is on the Extremities, if the *Diet* ought not to be low and cool; only the Solids and digestive

tive Organs are to be gently and temperatly braced and corroborated, to keep the *Inflammation* on the Extremity, which vegetable Bracers and Aſtringents will do. But the lower the Diet is, the ſafer: Give *Reſt* to a broken Leg after it is ſet, it will cure itſelf; give the *Stomach* little or nothing to do in the Affair of Digeſtion, (which is its proper Action) and it will mend itſelf. In groſs foul Habits, and putrified Juices, great Diſorders have enſued on a *low Diet*; but that was from a *Deſpumation* of the Habit: And I am convinced, whatever theſe ſuffer from a *low Diet*, would be doubled without it; and he who dies under it, would have died in half the Time, and ſuffer'd double the Miſery, without it: Nothing but putrefied *Organs*, and greatly corrupted Juices, can deſtroy ſuch a Perſon. When Life is far advanced, no wiſe Man ought to change any thing in his *Regimen*, but the Quantity.

§. 15. Some ingenious Gentlemen have ſaid or ſneer'd, For him, (the Author) who is as robuſt as an *Horſe* or an *Elephant*, a vegetable Diet may be proper; but for poor *tender*, *vapouriſh*, and *nervous* Creatures, it is Poiſon, Death and Deſtruction. Such Objections I ſhould be aſham'd to anſwer, if I did not know they came even from Perſons of *Character*, and reputed *Eminence* in the Profeſſion; and yet it is wrong,

wrong, and even frivolous, in every Part. As for *myſelf*, I have been all my Life of a *ſpongy*, *flabby*, *relax'd* Habit, of weak *Nerves* originally, eaſily ruffled, ſurpriſed and hurried, and thereupon readily running into Evacuations of all kinds, which infallibly indicat weak *Nerves*; and theſe Symptoms have been increas'd by a lazy Diſpoſition, and heighten'd by a *Mal-Regimen*, and *ſedentary* abſtracted Studies. And as to the Foundation of the Objection itſelf, it is *frivolous*. For if a ſtrong robuſt Body, originally or by a miſtaken *Regimen*, comes to have putrifying Juices, and broken or relax'd Solids, and yet by a low Diet, and *ponderous* Medicins, can recover a ſound Conſtitution, and good Spirits; ſuch a Diet will be infinitly more neceſſary for a poor weak *nervous* Creature: The firſt may ſtruggle and hold it out a great while by his natural Force; but the latter muſt be extremely miſerable, or periſh ſoon, without it. In Reaſon and Philoſophy, the Food ought to bear a Proportion both in *Quantity* and *Quality* to the natural Strength, Bulk and Capaciouſneſs of the Subject; and on that Score, if a large, ſtrong and capacious Subject cannot be cured without a low, cool and ſpare Diet; much leſs, ſure, can a poor, thin, ſmall and weakly Creature be cured without it in a proportional Degree. The Objection is, juſt as if one ſhould aver, that though a *Kite* or *Carrion-Crow* might live

active and gay on a low Diet, yet it would deſtroy a *Nightingale* or *Wren*.

§. 16. THERE are Inſtances alleg'd, of thoſe who after having been long under a *low Diet*, even of Milk and Vegetables, without being quite recover'd, nay, even ſtill continuing bad under it, upon returning to a *full high Diet*, (at leaſt a common Diet of *animal* Food, and *fermented Liquors*) have got perfectly well; and ſome (ſuch as I have formerly taken Notice of) that having chang'd their low Diet upon ſome *accidental* or *epidemical* Diſtemper happening to them, or by the Advice of ſome *complaiſant Foreigner*, have afterwards grown tolerably well. All I can ſay to theſe is, that very poſſibly a *low Diet* might be preſcrib'd where it was not abſolutely neceſſary, nor in all Circumſtances the fitteſt (as to *thoſe* well otherwiſe, but ſunk, *emaciated*, and their Juices render'd poor and *effete*, by violent *Paſſions*, ill-judg'd *Faſteing* and Abſtinence, or violent *Exerciſe*). And yet I know, or can poſſibly imagine, but one *Circumſtance* where this can be the Caſe; *viz.* when upon opening a Vein with a large Orifice, the *Curd* of the Blood has appear'd florid, ſufficiently fluid, with a right-colour'd and duely proportion'd *Serum*; but this *Grume* or *Curd* has been weak, poor and thin, without a ſufficient Body and Balſam, and the

the *Serum* too watery and *pellucid*. Some ſuch Caſes have occurr'd to me, where I always adviſ'd a *trimming* or even a common Diet of *animal* Food, and *fermented* Liquors, in Moderation, to be gradually enter'd upon to thicken and balmify the Juices; and it has ſucceeded accordingly. But as this Caſe ſeldom or never happens, but from a precedent too long Continuance of a *low* Diet, or the Circumſtances above recited, or from a too anxious and ill-judg'd Proſecution of the *Lighteſt* and the *Leaſt*; ſo it is certain, if ſuch Perſons had gone on in the ſame Method of a low Diet with *Diſcretion*, they would have been perfectly and durably well at laſt, and the *Grume* of the Blood would in Time have thicken'd and ſtrengthen'd even by the *ſame* Diet; for Nature will at laſt ever have its Due: But by Reaſon of their Fears and Apprehenſions, and their Deſire of being ſoon better, being allow'd and incourag'd to a higher and fuller Diet, they have thereby ſooner inrich'd and ſtrengthen'd their Blood and Juices, and acquir'd *high Health* for ſome time; but have ever paid for this *lucid Interval*, by *ſhortening* their Days, and dying in more *Miſery*. And therefore, with due Caution, I have ſometimes indulg'd ſuch Perſons for the *Hardneſs* of their *Hearts*; and they have gone on in common Life very well, which has been only owing to the balmifying, cooling and attenuating *Regimen* they had been

ſo

ſo long in formerly. But this has happen'd only to the *Young*, and to thoſe who were under or only about the *Meridian* of Life, who having naturally a long time as yet to live, could not be expected to have ſo much Steadineſs and Reſolution as to perſevere in ſo particular and uncommon a *Regimen*; and therefore I thought it not Prudence to put their Virtue and Courage to ſuch a *Trial*, but brought them out of this *low Diet* by Degrees with Caution, and with Advice to return to it upon the ſlighteſt perſevering Ails. Thoſe long paſt the *Meridian* of Life, I have never ſuffer'd to change. From this Account of the Caſe, it is plain the future Health injoy'd was not owing to the Change of a *lower* for a *higher* Diet, as the Objectors would inſinuat, but to the Benefit already receiv'd by the low Diet, and its having thinn'd the Juices, cleans'd the *Viſcera*, and empty'd the Veſſels, and thereby render'd them capable to receive a fuller and ſtronger Diet, and hold well for a time; though it is certain they had lived longer and healthier at laſt, and died with leſs Pain, had they continued their Diet. But I much doubt the *Fact*, on which the Objection is founded; for *Nature* is never ſo irregular and diſſonant to herſelf, as this Objection ſuppoſes.

§. 17. THERE is not a more puzzling and terrifying Objection made againſt a low Diet, and

and the Study and Purſuit of the *Lighteſt* and the *Leaſt*, which I have ſo ſtrongly recommended, than that ſome who follow it look *ghaſtly*, *pale*, *ill-colour'd*, and *waſted* to a prodigious Degree; which ſeems to threaten the Approach, and be the *Harbinger*, of *Death* and the *Grave*; ſo that moſt Perſons, terrify'd with the moſt diſtant Proſpect of it, eat and drink to the *full*, to ſecure againſt it; and ſo keep themſelves eternally ailing and miſerable, to prevent, as they think, this *fatal Effect*. And yet there is not a more groſs and more pernicious Miſtake, than the Whole of this *Objection*: For the ſole *Intention* of a low cool Diet is, by the moſt effectual Means, to prevent this very thing they ſo much dread. The Diſeaſe itſelf may be ſo rooted and incorporated with the whole Habit, and tranſubſtantiated into the Solids; the *Viſcera* may be ſo obſtructed and ſpoil'd, the Blood and Juices ſo *viſcid* and *morbid*, that even the new, ſweet, balſamic *Chyle* may not mix, aſſimilat, and incorporat with the old Maſs, ſo as to make an *homogenous* Fluid, (at leaſt not in any ſmall Time) to *nouriſh*, *plump* up, and carry on the *Circulation* to the Extremities, and *capillary Arteries* and *Veins*, whence lively Colour, Complexion, and *Plumping* ariſe; and this may cauſe an univerſal Waſteing, till the Blood and Juices be ſufficiently thinn'd and balmify'd, and acquire its *ſcarlet* Colour, and the *Obſtructions*

ſtructions of the *Capillaries* and *Glands* be made *pervious*. But this is not the Fault of the *Diet*, but of the *Diſtemper*; for all the World knows and acknowleges, that ſuch a *Diet* makes *Children*, *Farmers* and *Country Perſons*, who can afford no other *Diet*, look the freſheſt, moſt healthy and lively; and this *Diet* never fails in one ſingle Inſtance, when the *Cure* is once thus completed, the Juices ſweeten'd, and the Functions made regular and free, it never fails, I ſay, to produce this Plumpneſs, Livelineſs and Freſhneſs. While the Cure is performing, the greater the *Waſte* of the old morbid *Habit* is, the more perfect and full will be the Recovery, and future *Plumpneſs*, provided the Waſteing come from the Thinneſs, Coolneſs and Softneſs of the Diet only; without *Hectic*, violent Evacuation, or evident *Symptom* of ſome *noble Bowel* ſpoil'd; for then it is the ſureſt *Mark* of their future perfect Recovery. A Perſon who is two or three Years in *waſteing*, and all that time purſues the *Lighteſt* and the *Leaſt*, will infallibly in as many more, or ſooner perhaps, come to perfect Health and Plumpneſs again; and it is this *Diet* alone that can prevent their running down too faſt and precipitatly, and the only thing in Nature that can put a Stop to their waſteing, and, as it were, put a *Drag* on the Wheels, to hinder them from running too faſt down Hill; for when the

Juices

Juices are perfectly sweet, the *Wasteing* will cease, and the *Plumping* begin. When I see a Person thin, meagre, and ill-colour'd, I conclude, without asking Questions, that he is under a *Mal-Regimen* of *Diet* as to him, whatever other Appearances of Health he may have; and if he continue so dureing a *whole Life*, I conclude he continu'd under that improper *Regimen*; for a proper, low, soft *Diet* will as infallibly at last (if no great *Organ* be spoil'd) make him look fresh, plump and healthy, as *Summer* will succeed *Winter*. A Person under a *cachectic* Habit, and *chronical* Distempers, must waste and throw off every *Fibre* and Atom of that old *Habit*, fluid and solid, before he is renew'd, and becomes plump and healthy again; and those who are under the Necessity of such a *Diet*, or under the *Lightest* and the *Least*, ought to expect *this* Degree of Recovery, some sooner, some later, according to the Degree of the *Malignity* and Obstinacy of the Distemper, and to ground the Hopes of the Degree of their future Recovery on this *Fact*, and not to be puzzled and terrified by Gainsayers; for if they persevere obstinatly and strictly, they will recover, and get plump, gay, and healthy again, if none of the great *Organs* be spoil'd; and even then they will last longer, live easier, and lie down more gently: And this is the best can be expected in such a bad Case, where some necessary

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Appendage or *Organ* to Life is quite and irrecoverably ſpoil'd or loſt; for no Diet, Medicin, or Means, can create ſuch an *Organ* anew; and yet Nature has wonderful Reſources even in ſuch a Caſe, under a low ſweetening Diet, either by makeing the remaining Part of the *Organ* ſufficient by its *Dilatation*, and by opening new Paſſages, or forming *ſuccedaneous Joints* and *Organs*, to make the Perſon laſt and become eaſy under ſuch a Misfortune; and we have Inſtances of Perſons who have lived long and eaſy with one *Lobe* of the *Lungs* or *Liver*, when the other has adher'd or turn'd ſcirrhous, and been quite uſeleſs; and where the *Hip-Joint* diſlocated has form'd a *ſuccedaneous* one; and where an *Artery* cut by inlarging the collateral Branches, has nouriſh'd the Part, even there where that cut *Artery* was originally directed: But theſe Advantages can never happen, but under a ſoft, cool *Diet*. It is indeed a fatal *Symptom* to waſte and fall away under a full, free, and *high Diet:* It is a certain *Symptom* of a *Non-aſſimilation*, a Decay, or a ſcorbutic and *nervous Atrophy*; it ſhews want of Digeſtion, or Aſſimilation of the new *Chyle* with the old Blood; but under a *Milk* and *Seed Diet*, all theſe Faults and Inconveniencies are avoided, as much as the Nature of the Caſe will admit. Milk and Seeds will thin, dilute, unite and incorporat with *Glew* ſooner than Birdlime, Size, or Camp-Jelly diluted would;

would; Water and aqueous Liquors warm'd, will diſſolve and incorporat with the ſtrongeſt *Viſcoſities*, and are the only Subſtances that can poſſibly do it: So that on the Whole, in bad Caſes, ſizy Juices, *lixivial* and inflammatory Blood, watery Fluids, with cool, ſoft and light ſolid Powders or Mixtures of Seeds, as Milk-meats, Seed-meats, and *vegetable* Food, muſt be allow'd to be the only poſſible Mean in all Nature, that can prevent this ſo much dreaded Waſteing and Conſumeing; and they that waſte and fall away under it, muſt conſume twice as faſt in half the Time without it. And it is obſervable in all thoſe who waſte in a mortal Diſtemper, that their *Atrophy* is always attended with and from ſome ſenſible *Evacuation*, ſuch as a *Diarrhœa*, conſtant Night-Sweats, an *Hæmorrhage*, profuſe *Ptyaliſm*, or a violent *Cough*; and thoſe who waſte inſenſibly under a *Regimen*, are ſeldom in Danger of Death, but generally recover, and grow fat at laſt, if the Waſteing be not attended with ſome profuſe Evacuation mention'd, which implies the Corruption of ſome neceſſary *Organ* of Life. But this Caſe being the moſt formidable of any, will be fully conſider'd in the following Chapter.

§. 18. It is a common *Objection* againſt a low and *vegetable* Diet, that it cuts off the Means of a Cure, if either by *Accident* or *epidemical* Cauſes, a Diſtemper ſeizes ſuch a Perſon.

Perſon. But theſe Objectors do not conſider, that by this their own *Confeſſion*, the proper and moſt effectual Cure of any Diſtemper is by a low Diet, ſince it ſuppoſes this Diet would cure the Diſtemper when the Party ſeized were under any other *Regimen*, *viz.* one of Meat and Wine. But to anſwer the Objection *directly*; as to *Accidents* and *epidemical* Diſtempers, I know no Fence againſt them. If the Misfortune happens by an *Accident*, none can doubt, that he who has good Blood and Juices (and which this *Diet* is ſuppos'd always to produce) will ſooner and more probably be cured by the common Methods, than he who has the contrary *Habit*: And the ſame is to be ſaid of *epidemical* Diſtempers; he who has a good ſweet-blooded Habit, will have a better Chance to get over them, than he who has a morbid Conſtitution. But, 1. Under a *low Diet* it is a Contradiction, that a Man ſhould naturally, and from the common Laws of the *animal Oeconomy*, fall into any dangerous, painful, or mortal Diſtemper; for the *Antidot*, *i. e.* the *low Diet*, is a continual Preſervative, as even this Objection ſuppoſes, and as Heat is a conſtant Preſervative againſt Cold. But, 2. Suppoſe the impoſſible Caſe ſhould happen, it is but leſſening the Quantity of the Materials of the *ſame Diet* for ſome time, with the common Medicins, which will more effectually and ſooner cure the

Diſ-

Diſtemper, than it would be cured even in deſcending from a full *animal* and *vinous Diet* into a *low* one. But, in Fact, the Objection is both unnatural and unphiloſophical, and implies its own Anſwer.

§. 19. It may be the Opinion of ſome Phyſicians, as well as of ſome Patients, that Life, without *ſenſual Pleaſures* and Enjoyments, is not worth having; and therefore, when their *Patients* are by *Luxury*, or *hereditary Diſtempers*, reduced to a very *low* and *wretched* Condition, they think the *Preſervation* of their Lives by ſo long and painful a *Self-denial* as is here preſcribed, would be too dear a Purchaſe; or that the *Game* is not worth the *Candle*: and ſo may preſcribe very *active* and dangerous Medicins at a *Venture*, either to relieve or to end them; at the ſame time indulgeing their deprav'd *Appetites* in whatever kinds of Meats and Drinks they *crave*, or can get down. But ſuch *Phyſicians* do not conſider, that they are accountable to the Community, to their Patient, to their Conſciences, and to their *Maker*, for every Hour and Moment they ſhorten and cut off, of the natural Duration of their Patients Lives, by their immoral and murderous *Indulgence*. And the *Patients* do not duely ponder, that *Suicide* (which this is in Effect) is the moſt mortal and irremiſſible of all

Sins: And Neither has ſufficiently weighed the *Poſſibility*, that the Party, if not quickly cut off by both theſe prepoſterous Means, may linger out miſerably, and be twenty or thirty Years a dying, under theſe *Heart* and *Wheel-breaking* Miſeries, thus exaſperated: Whereas by the Methods I propoſe, if they obtain not in time a perfect *Cure*, yet they certainly thereby leſſen their *Pain*, lengthen their *Days*, and are continued, under the *Order* of Providence over them, and the benign *Influence* of the *Sun* of *Righteouſneſs, who has Healing under his Wings*; and, at worſt, ſoften and lighten the *Anguiſh* of their Diſſolution, as far as the Nature of Things will admit.

Chap. IV.

Reflections *on the general* Method *of* Cure *of hereditary or acquired* Tenderneſs, Thinneſs, Waſteing, *or* Valetudinarineſs *of* Conſtitution, *from whatever Cauſes.*

§. 1. IT is certain every *Animal* (rational or irrational) in perfect Health, where all the *Functions* are regularly perform'd, and who has at hand Sufficiency of proper Food, muſt become at laſt *plump*, *freſh*, and *roundiſh*: If it is otherwiſe, though there ſhould be no real Complaints of Diſorders *felt* or *ſenſible*, yet there muſt be a Defect ſomewhere, either of an improper *Diet*, an imperfect *Digeſtion* or *Aſſimilation*, or les'd internal *Organs*. It is very poſſible this Defect may not be ſenſible or felt, while the *Fibres* and *Solids* are not yet come to their greateſt *Extenſion*, that is in *Youthhood*; being hid and conceal'd by the greater *Elaſticity* and *Volubility* of theſe Solids at that Time of *Life*. But if there be an habitual *Thinneſs*, *Leanneſs*, *Tenderneſs*, and *Valetudinarineſs*, there muſt be ſome *Dyſcraſy* in the Juices, or Imbecillity in the Solids, *natural*, *hereditary*, or acquir'd. The *intellectual Organs* may be, and often are, in *ſuch* Conſtitutions more acute, penetrating and comprehenſive, than in thoſe of the Fat

and Plump, eſpecially if theſe laſt are overloaded with Clay; but the bodily Health of the *Lean* and *Wither'd* is always ſo tottering, precarious, and ſubject to the ſmalleſt *Accidents*, that it hinders even the Improvement and Culture of ſuch delicat intellectual *Organs*, to that Height they might otherwiſe be carried. If theſe *Infirmities* be only middling and tolerable, and not come to their laſt Stage, a general *Temperance*, *good Air*, *Exerciſe*, and a proper Care of all the *Non-naturals*, may ſuffice to carry on Life tolerably, to the Length of its natural Duration. But when the waſteing *Caſe* is extremely bad, obſtinat, and dangerous, not yielding to the beſt Advice and Means commonly uſed, I intend here to ſuggeſt the moſt probable *Method* known to me, or I think knowable in the Nature of Things, to give ſuch the beſt Chance for an *extirpative* Cure, at leaſt for as long a *Life*, as much *Eaſe*, and Freedom of *Spirits*, as ſuch a *Caſe* will bear.

§. 2. In ſuch a *Caſe*, and ſuch a Stage of it, as I have deſcrib'd, there is nothing can do any real Service but a ſtrict Milk and Seed Diet; and if it has not been enter'd on before, it ought, without any Heſitation or Preparation, to be enter'd upon directly; eſpecially if upon letting out a few Ounces of Blood for Trial, it is found *ſizy*, (as I could venture my Life it will in ſuch a Caſe be, as I always found)

found) no ſuch *Atrophy*, or Thinneſs, being ever poſſible, or of any Duration, but where the Blood is almoſt like *Camp-jelly*, ſo as that no *Aſſimilation* can be made; and Milk and Seeds can only furniſh out a *Chyle*, that will gradually mix with, dilute, and thin this old *glewy Fluid*, and prevent a mortal *Waſteing*; and in this *Caſe*, *Aſs's Milk* is far preferable to any other Kind, it being already true, ſweet, kindly *Chyle*, which only can get through the *Lacteals*, probably almoſt in its own unbroken State; and to which all *Chyle*, that naturally nouriſhes, ought to be ſimilar in *Fluidity* and Sweetneſs, come it from animal or vegetable Food; the Qualities of *Aſs's Milk* being, due Thinneſs or Fluidity, Sweetneſs and *Balſam*, which no other *Chyle* or nutritive Milk, from either animal or vegetable Food, has in ſuch an Eminence; and conſequently no other *Milk* or *Chyle* is ſo nutritive, or ſo readily convertible to *Fleſh* and *Blood*. The greateſt *Cures* I have ever ſeen perform'd in Diſtempers abſolutely deſpair'd of, in this Kind, have been perform'd by *Aſs's Milk* for Breakfaſt and Supper, and only Cow Milk and Bread for Dinner, hot in Winter, and cold in Summer-heats. *Nervous* and *ſcorbutic Atrophies*, and Thinneſs in leſſer Degrees, may admit of greater Variety of Foods. All the Garden Things much boil'd, and dreſs'd with Cow Milk, are much the ſame as a *total Milk*

Diet, with the Difference only between *animal* and *culinary* Cookery; but a Milk and Seed Diet, or even *Milk* only for *Diet*, (as in Dr. *Taylor* of *Croyden's* Caſe) is the moſt infallible, and indeed the only proper Means known or knowable, to give a *Chance* for a *Cure*, in ſuch a deplorable Caſe as I have repreſented, or indeed in any deſperat Caſe whatever; and I am poſitive, if this *Regimen* will not do, no other poſſibly can; and if it ſhould not *cure*, it will abſolutely prolong *Life* more, and make the *Symptoms* milder: But moſt Patients will not be brought into it, till it be too late. And here the *artificial Aſs's Milk*, of three Parts Barley-water, (made with two Ounces of Barley, one of candied *Eringo* Roots to three Pints of Water boil'd to a Quart and ſtrain'd, and a fourth Part of boil'd and skimm'd Cow Milk added to it) may be a good *Succedaneum* to natural *Aſs's Milk*, if it cannot be readily had.

§. 3. So much for the *Diet* of ſuch thin, *waſteing*, and *valetudinary* Patients, in its laſt Stage: And as ſuch have neither *Digeſtion*, nor Strength to bear active ſtrong *Evacuations*, or *Alteratives*, their Medicins muſt bear a *Proportion* to their *Diet* and Imbecillity; there is no Evacuation proper and accommodated to their Strength and Spirits, but weak waſh Vomits, often repeated, ten or twelve Grains of Powder, or an Ounce of the

the Tincture of *Ipecacuana* work'd with Chamomil-Flower-Tea, and provok'd with a Feather, once a Week, or at leaſt every Full and New Moon; but eſpecially upon *Watchfulneſs*, *Flatus*, ſwell'd *Stomachs*, or caſual *Exacerbations* of *Symptoms*, to which all ſuch are generally ſubject: But what I much prefer to all artificial *Emetics*, is tickling the Throat and *Glands* with their Finger till they *keck*, and then ſpitting, or ſuffering the Phlegm to run out into a Baſon; and repeating this for thirty or forty different times every Morning, or every ſecond or third Morning, or as often as they find a Neceſſity or Inclination to a painful or laborious Belching or Exploſion of Wind; for by this Method long and duely purſu'd, they will empty the *Glands* of their *Phlegm* or *Choler*, and pump up the *penn'd* Wind with much more Eaſe and Safety, than by any artificial *Emetic* whatſoever; without thoſe Deluges of nauſeous Draughts commonly uſed by unskilful *Apothecaries*, to ſave their Time; when it is certain from Experience, that a *dry Vomit*, with little or no Liquor, though more painful, is infinitly more effectual, than two or three *wet Vomits* with much drinking; for the great Efficacy of *Vomits* lies in the *Throws* and *Spaſms* on the *Muſcles* of the *Abdomen*, by which the Obſtructions in all the *Glands* are forced open, the *Size* in the Juices is broken and

divided, and the *Perspiration* render'd pervious; and by these *Thumb-Vomits*, (as I call them) without Drink, or Powders, together with constant drinking Ass's Milk, I have done *myself* more Service, in mending my Blood, and plumping up the *Muscles*, as well as many others, to whom I have communicated and taught the *Trick*, than by all the other Operations of *Physic* or *Medicins* I have ever used in such low and desperat Cases. This Method is only an Imitation of the *Operations* of Nature, which naturally and mechanically prompt all Persons loaded with *Phlegm*, *Choler*, or Wind, by tickling their Throat till they keck, to throw them off; which generally relieves in such a Circumstance, like *Sneezing*; and *Medicus debet solummodo Naturæ administrare*. And any one who has an Aversion to *artificial Vomits*, may by Practice, and bringing the *Muscles* of the *Abdomen* to an easy *Play*, get a Facility in this *Trick*, for his certain Relief on all necessary Occasions, as I have found to my great Comfort, and the Relief of many others, especially the Delicat, *Hysterical*, Wasted, and Low-spirited: But it must be pursued with Obstinacy and Perseverance, till a Facility be acquir'd.

§. 4. The only Inconveniency of such frequent *Thumb* or other *Vomits* is, that the necessary *Revulsion* caused by them sometimes makes them

them extremely and painfully *coſtive.* But ſo far is this from being a real Evil, that it is one of the beſt Effects theſe *Vomits* can produce; for any Degree of Looſeneſs or Purgeing is almoſt certain Death to ſuch Perſons, and they generally go off in a *Colliquative Diarrhœa,* which theſe *Thumb-Vomits* generally remedy or prevent; for theſe *Diarrhœa's* in ſuch tender and *thin* Perſons, not only carry off all their Food, but indicat that the whole *Syſtem* of the Solids and *Nerves* are irrecoverably relax'd. But ſhould ſuch a *Coſtiveneſs* be obſtinat and troubleſome, a little *lenitive* Electuary over Night, a Drachm of *Lac* or *Flores Sulphuris*, an *Anderſon's* or a *Ruſi* Pill or two, will ſafely and gently relieve; a Milk or a Broth Clyſter, with a little Oil of Sweet *Almonds*, will bring forth the harden'd Balls, that obſtruct the *periſtaltic* Motion; ſupping on Apples and Milk, ſtew'd *Prunes* with *Senna,* or any ſuch-like gentle *Aperient*, will conſtantly relieve this *Symptom:* But in Reality, unleſs it becomes extremely painful and obſtinat, it is much better to bear than relieve it; for thereby the Food has a longer Time to paſs the *Lacteals*, to mend the Blood, and plump up the *Muſcles*, and to allow the Solids and *Nerves* to conſtringe, to criſp up, and regain their *Buckle* and Spring; for I know nothing that depreſſes the Spirits, waſtes the Fleſh, and relaxes the whole *Syſtem* of the Nerves

and

and Solids, ſo much as frequent and copious Purgeing and Stooling, as is well known in the common and unnatural *Cure* of the *Gonorrhœa Virulenta*; and therefore I ſeldom or never uſe any *Purgatives* myſelf, nor preſcribe them to my *nervous* and *valetudinary* Patients: More Abſtinence even under a low Diet, more Exerciſe, and *Thumb-Vomits*, always ſupply to me the Place of *Cathartics*, in ſuch delicat Caſes: It is only the Strong, Robuſt, and thoſe of too hard and firm *Nerves*, that ſucceſsfully bear much Purgeing; and I think two pretty ſevere Vomits hurt not the Conſtitution ſo much as one *draſtic* Purge; for it is notoriouſly known in all ſuch Caſes and Conſtitutions as are now under Conſideration, that it is the *Relaxation* and Imbecillity of the Stomach that is the great Cauſe of all their Sufferings, together with the Viſcidity of the Juices; and if theſe be ſufficiently attended to, all the reſt will come about in Time; the *Stomach* itſelf, like a broken Leg, by giving it little to do, or uſing it very ſpareingly, will knit, thicken, and conſolidat of itſelf mechanically; the infinit Glands of the Stomach and Guts, conſtantly ſpewing out their viſcid Contents, want frequent Cleanſeings by *Thumb-Vomits*; below they are fewer towards the *Rectum* and *Anus*, and ſo theſe want fewer Cleanſeings by Purgeing.

§. 5. When

§. 5. When the *Blood* and *Juices* are *thick*, *viſcid*, and *glewy*, (as they always are in ſuch Caſes) and thereby all the *Capillaries* and ſmaller *Lymphatic* Veſſels are ſtuffed, obſtructed, and compreſſed, nothing will give them Relief, Freedom, and *Roomyneſs*, like little frequent *Phlebotomies*, three, four, five, or ſix Ounces at moſt every *Week*, *Month*, or *Quarter*, as they can bear it, or as the Blood appears when let out of a large Orifice; but it is never to be continued after the Blood hath loſt its *Buff*, or its *liveriſh Craſſity*, nor after the Patient goes into Fainting, or long Lowneſs upon *Letting*; for if either of theſe enſue to any Degree, it is a certain Sign *Phlebotomy* will no longer do (no not in any Caſe where *Phlebotomy* is perform'd; for where it is proper, it will always raiſe the Spirits in a little time after); nor is the Evil in the great *Trunk* Veſſels, but in the ſmalleſt Branches and *Capillaries*, for which another Method is to be tried, afterwards to be ſuggeſted. But as long as the *Blood* is ſtill cover'd with a *Buff* or Parchment, its *Curd* ſtill *liveriſh*, and its *Serum* yellow, tawny, or ſaltiſh, and the *Patient* has rather better than worſe *Spirits* after it, little frequent *Phlebotomies* will be of great Service to give the Juices room to circulat, to take off the Reſiſtance from them, to the *motive* and *elaſtic* Powers of the *Organs* and *Solids*, and to ſupply its Room with ſoft, mild, ſweet and

ſound

ſound Juices, which by Degrees will *aſſimilat* and mix with the old *viſcid Maſs*, and mend it. I have known beginning *Phthiſes Pulmonum*, *Hectics*, *Pleuriſies* and *Rheumatiſms*, often prevented or cured by theſe, when a ſoft, ſweet whey *Diet* has been join'd to them.

§. 6. When the *Blood* is brought to a pretty tolerable State in the *Trunks* of the great Veſſels, and the Fault ſeems now confin'd to the *Glands*, *Capillaries*, or *Lymphatics*, the *alterative* Medicins, that are moſt likely, that I ever could find to reach them, were *Cinnabar native* or *factitious*, the *Aqua Argentea*, *Millepedæ*, *Nitre*, and *Lac Sulphuris*, with the *Teſtacea*, combin'd in ſuch Forms as were moſt agreeable to the Patient, or ſat lighteſt on the Stomach. I can honeſtly aver it, I never ſaw ſuch ſalutary Effects in any obſtinat *Caſes*, eſpecially ſuch as thoſe now under Conſideration, as from long Perſeverance under large Doſes of *native* or *factitious Cinnabar*, waſh'd down with Aſs's Milk, or ſweet Whey. It ſeldom gives any Trouble, unleſs it be in the Stomach at firſt; and has no ſenſible Operation, but ſweetening and attenuating the Blood in the ſmalleſt Veſſels gradually: It only keeps from troubleſome *Coſtiveneſs* ſuch weak *Conſtitutions*, by the *Sulphur* in its Compoſition. I have given it for a long Time to *three Drachms* a Day in any Vehicle; and twice a Year, Spring and Fall, for ſix Weeks; and had it continued for

for twenty Years, by which the Patient has grown ſtrong and fat at laſt. And I take it to be a much nobler Medicin for mending the Blood, and opening the Capillary *Glands*, and preventing acute Diſtempers, provided due Temperance and Exerciſe be join'd to it, than even my Lord *Bacon*'s ſo fam'd *Catholicon Nitre*, which yet is moſt certainly a noble Simple, and the greateſt *Antidot* againſt *Inflammations* and *feveriſh* Diſorders known to Men. Experience ſhews that it attenuats and malaxes the *Curd* of the Blood, and thins its viſcid *Serum*, even in the Air, or in Blood let out; and its Effects on *Fire*, and in *Reſpiration*, prove it the greateſt Friend to *animal* Bodies. The *Millepedæ*, as is known, are nothing but a ſimple kind of *Sal Armoniac*, or *Nitre*, *mill'd* by *animal Organs*, and intimatly mix'd with *animal* Juices; and is noted for its Efficacy in Inflammations on the Eyes, and Obſtructions in the *optic* Nerves and *Glands*, and ſure they are among the moſt delicat of *animal Organs*. The Fault is, theſe are not given long enough, nor in ſufficient Quantity, to produce any great or ſenſible Effects: But I firmly believe them to be far beyond all your now fam'd *chymical* and quack *Secrets*, Drops or Pills, if a proper Regimen be join'd with them, and are without all poſſible Danger to the weakeſt *Infant*. As to the *Teſtacea*, their Nature and Operation are ſufficiently known, and

their

their Texture viſible by a common *Microſcope*, *viz.* that they are only ſolid *Spunges*, which ſuck, *attract* and receive into their *Pores* all *Acids* where-ever they meet them, eſpecially in the *Primæ Viæ*, where *Acids* are chiefly to be found; and I am certain, *Cinnabar*, *Crabs-eyes*, *Nitre*, and *Cochineal*, finely powder'd, and waſh'd down with any agreeable acidulated Draught, ſuch as the *ſalin* one of *Salt* of *Wormwood*, and Juice of Lemon duely mix'd in common Water, Milk, or Barley-water acidulated with *Currant-Jelly*, and the like, is one of the beſt *Febrifuges* known to Men, particularly where no *cutaneous* Eruption, or *critical* Puſh, is expected; for then theſe Medicins muſt be aſſiſted with ſome warmer conſtringent and propelling Mixtures, to forward this Effect.

§. 7. FRICTION with a *coarſe Towel*, warm Flanel, but eſpecially the *Fleſh-bruſh*, over the whole Body, and particularly the *Spine* and *Limbs*, is an admirable Operation to allicit the Blood and Juices to the Surface of the Body, and conſequently to plump the *Muſcles*. It rubs out and diſcharges the *Plugs* and *Obſtructions* in the Oriſices of the perſpiratory *Glands*; and if the whole Skin be waſh'd after with a *wet Towel* in warm Water in cold Weather, and in cold Water in hot Weather, it will contribute to free it from the *Scurf*, and chopp'd *Cuticle*, that clogs

the *Perſpiration*, which will greatly ſerve to promote the *Circulation*; and this *Method* ought to be continued for half or a quarter of an Hour, Morning and Night; and a cloſe ſtreight-button'd Cotton *Waiſtcoat*, for conſtant Friction, ought to be worn next the Skin, and a *broad Belt* about the *Loins*, to keep all the Bowels and the *Lacteals* in their proper and natural Situation.

§. 8. When the *Blood* is in a good meaſure thinn'd and ſweeten'd, (which a little *Phlebotomy* will always diſcover, by comparing the Blood with that of a Sheep or Calf) the beſt Medicins for braceing, tanning and hardening the Solids, the alimentary Tubes in particular, are the *Bark*, and its Preparations, the *Extract* of the *Bark* with a third part of the Extract of *Rhubarb*, made into Pills with *Balſamum Polychreſt.* or an *Electuary* of theſe, with any agreeable Syrup; about half a Drachm or forty Grains of theſe twice a Day on an empty Stomach, waſh'd down with *Briſtol* Water, or the following *Apozem, viz.* ſix Drachms of powder'd *Quinquina*, half an Ounce of *Miſleto*, three Drachms of the *Extract* of *wild Valerian*, two of *Orange* Peel, half a Drachm of *Cardamoms*, and one Drachm of *Cochineal*, infus'd in three half Pints of *Briſtol* Water to a Quart, ſtrain'd and filtred, about four or five Spoonfuls of this for a Doſe, for ſix Weeks,

Weeks, Spring and Fall; chewing and swallowing a Scruple or half a Drachm of fine *Jesuits Bark* three times a Day, on an empty Stomach, and every third Night chewing a *Scruple* of *Rhubarb*, is an excellent Bracer in such a low *Case*; and ten or fifteen Drops of *Elixir* of *Vitriol* in a Glass of fresh *Spa* or *Pyrmont* Water, (if it does not tighten too quickly, or pain such tender Entrails) taken twice a Day, would much serve the same End, and give Appetite, Strength and Spirits.

§. 9. COLD Batheing in the *Sea*, or a *River*, a cold *Bath*, or Batheing-Tub, at least all the hot Part of the Summer, would greatly advance the same Purpose; but even this so effectual a *Strengthener* will be of little or no Value, unless the *Blood* be already thinn'd and sweeten'd. I myself have tried it many Hundreds of Times, with no manner of Benefit; nay, in some it has been attended with many Incommodities, and much Danger of violent *Head-achs*, *Chills*, *Contractions* and *Intermittent Fevers*, if too long or too hastily pursued, before the Blood was mended, which when effected, both I and many others have found great Benefit from it; so that I have never advis'd Cold Batheing since, without previously, by *Phlebotomy*, seeing into the State of their Juices and Bowels; and always forbad it, when I found them bad. It is always necessary, at least at first, to have the Head well spung'd, and cool'd with cold Water,

ter, before plungeing; and they ſhould either be thrown in Head-foremoſt, or, which I think ſafeſt, walk down the Steps as faſt as they can, and bending their Knees, and ſhortening their Bodies, get their Heads under Water; this for three or four times in the cold Bath, and out again, which ought not to exceed two or three Minutes. In a River or the Sea they may continue ten or fifteen Minutes: For, like all other *medical* Operations, it is much better to be perform'd often, and but little at once, than to be long about it at one time: *Gutta cavat lapidem non vi, ſed ſæpe cadendo.* It is certainly, in valetudinary and waſted Conſtitutions, of great Efficacy in warm Seaſons, when the Blood is ſufficiently thinn'd.

§. 10. BUT no Rule or Inſtitution for braceing the Solids and Nerves is equal to *Exerciſe* of all kinds. *Rideing*, *Coaching*, *Walking*, *Bowling*, playing at *Shuttlecock*; in ſhort, all Exercile of whatever kind it be, is good and beneficial. In Winter and bad Weather, within Doors the *Tremouſſoir*, a *Hamock*, the *Dumb-Bell*, plying a *Pump*, walking in a Gallery, or a *Suite* of Rooms; in good Weather theſe other mentioned Exerciſes, and many more mentioned by *Gymnaſtic* Writers, of which the ingenious Valetudinarian may contrive ſome properly ſuited to the Weakneſs of his particular *Organs*, or

Limbs: But none of them will be of any great Efficacy, without joining a proper ſweetening and diluteing *Regimen*. *Exerciſe* ought to be conſtant, uniform and regular as *Diet*, and to be purſued on an empty Stomach, at as great a Diſtance from Meals as is poſſible; not violent, nor long at a time, but orderly at proper Hours; and no more interrupted any long time than Food; not to Sweating, but to Warmth. I am greatly perſuaded Rideing is beſt for Digeſtion, for diſperſing and opening *abdominal* and *meſeraic glandular* Obſtructions; but Walking is beſt for *Nutrition*, diſtributing the *Chyle*, and plumping up the *Habit* and *Muſcles*. Violence and Obſtinacy in Exerciſe of any kind, is deſtructive to Health, and has the ſame ill Conſequences as all other *Exceſſes*.

§. 11. It is ſurpriſing, that Mankind, *Phyſicians* eſpecially, have been ſo late in examining and diſcovering the great Benefit of *mineral* Waters of the ſeveral kinds. Firſt Plants, Fruits, Seeds, and Roots, were tried for the *Cure* of Diſtempers; and in examining them, little elſe was neceſſary to obſerve but the Uſe the ſeveral kinds of *Animals* made of them for their Food or Phyſic, when ailing or aggriev'd: After that, Men obſerv'd what Effect the Juices and Fleſh of ſeveral *Animals* had on ſome Conſtitutions and Diſorders, for Food or Phyſic; then they practis'd

dis'd on the Minerals of all kinds, which was a moſt unnatural and *unphiloſophical* Courſe of Medicins, at leaſt when not infinitly levigated and refin'd; and even then ſcarce ever proper to enter an *animal* Body, or its delicat *Meanders*, at leaſt humanly prepar'd; as we ſee by the *brute* Creation, which by no Art will ever be brought to ſwallow them ſpontaneouſly, even in Water for Drink. But to fit the *Minerals*, (even againſt the Intentions and in ſpite of Nature) the *Tortures* of the Fire in *chymical* Preparations have been found out and applied, which I am convinc'd have been more pernicious and deſtructive to human Creatures, either in its *vegetable* or *animal*, much more in its *mineral Products*, than *Gunpowder* itſelf; and all this Time the ſalutary Effects of the natural, or, I may ſay, the divine Preparations of the *mineral* Tribe, combined, proportioned and divided infinitly in the ſeveral kinds of *mineral Waters*, have been overlook'd; and yet, I may ſay, there is ſcarce a *Mile ſquare* on the Surface of the *Globe*, at leaſt not a Mountain or even Hillock, where there ſprings not up ſome *mineral* Water, fitted for the Cure of human Diſtempers in all the kinds of Medicin, *Evacuant*, *Alterative*, or *Strengthening*, if duely examined, and judiciouſly directed, eſpecially if a proper *Regimen* of Diet were joined to them. And I think it Demonſtration, that where there is a *Hill* or conſiderable Eminence, there muſt be a *mineral* Water, ſince a Hill is nothing

but the Neſt of ſome *Mineral*; but there will be requir'd Skill and Experience to fit them to the Diſeaſe and the Patient. I ſhould hope, ſince the infinit Variety of *mineral* Waters in his Majeſty's Dominions, have been begun to be carefully examin'd, and their ſeveral Compoſitions, Natures, and Virtues, have been, with ſome Exactneſs, inquir'd into and found, if Temperance and *Propriety* in *Diet* were univerſally ſtudied and recommended, the better ſort of People might paſs their Lives in leſs *Miſery* than they commonly do; for I cannot but think the *Author* of Nature, who has ſo liberally provided for the Wants and Neceſſities of all his Creatures, (among which Want of Health is the moſt material and weighty for all the Ends of Liveing, in order to preſent or future Felicity) has appointed and marked out, by his own *Signature*, ſome general *one* for this Purpoſe; and in fifty Years Study and Obſervation, I could never yet meet with any one that has this *Mark* of divine Appointment ſo glareingly as a *low Diet* in general, and in particular Caſes a *Milk* and *Vegetable* Diet, or a Diet of very little animal Food, and common or *mineral* Water Beverage of one *ſpecific* Kind or other, fitted to the Complaints and *Symptoms*. The Determination of the *ſpecific Mineral* Water muſt be left to the Sagacity of the *Phyſician* in ordinary, and to the Kinds, Degrees, and ſeveral Stages of the

Diſ-

Diſtempers. But I think one or other may be eaſily found, that would greatly alleviat the Complaints of moſt *Valetudinarians*; and few or none of them are much hurtful in any Caſe, but what the *Patient* will readily find himſelf, or an ordinary *Phyſician* may diſtinguiſh. The chalybeat mineral Waters are all Aſtringent and Invigorating, the ſalin all Evacuant, and the cretaceous all Alterative and Sweetening, and a Mixture of Principles has a compounded Effect.

§. 12. It is of the utmoſt Conſequence, that ſuch *valetudinarian*, waſted, thin Conſtitutions, breathe a good, kindly and benign *Air*. I have often had Occaſion to mention of what Uſe and Neceſſity the *Air* is to attenuat, enliven and brighten *animal Blood* and Juices, as is manifeſt from the Difference between the *arterial* Blood *mill'd* and clarify'd by the *Air* and its *Nitre* in the *Lungs*, and the *venal* Blood, which has not as yet gone through that Operation, or is ſtumm'd in its ſlow and remoter *Circulation*. A pure, clean, tepid, dry *Air*, ſaturated with a due Degree of *volatil Nitre*, and the Steams of *odoriferous* and *ſanative Plants*, induces a *Balſam* and Livelineſs on *animal* Juices, as is evident from the Difference between *Summer* and *Winter*, fair and cloudy Weather, on *Animals* of all Kinds; and therefore a *Valetudinarian* ſhould chuſe to live in an

open *Champaign* Country, guarded from Northerly and Eaſterly Winds, of a moderat Elevation, or in a *Medium* between the *Tops* of the higheſt neighbouring Hills and the Surface of the *Sea* or *Rivers*; and have his Windows expoſed to *South* or *Weſt*, and his Bed-chamber *ventilated* by open Windows in the Day-time. The true Reaſon, *Philoſophy*, and Benefit of all which is, with great Judgment and Elegance, explain'd and enforc'd by the ingenious and learned Dr. *Arbuthnot* in his *Eſſay on Air*.

§. 13. I HAVE been longer and more particular on this Diſtemper than any other, becauſe it is a general one, includeing *Scurvy*, *Scrophula*, *Atrophy*, *Phthiſis*, *Gout*, *Stone*, *Aſthma*, and *nervous* Diſorders of all kinds, in their laſt Stages, which are generally, one or other, the radical and fundamental Diſeaſe or Source of all *chronical* Diſtempers whatſoever, attended with an *Atrophy*. I have taken this Caſe in its laſt *Stage*, and worſt State, and carried it on from thence to its Term, either in *Death*, or ſuch a Degree of *Recovery* and *Health*, as an hereditary Valetudinarian can expect, or riſe to; which can never indeed be to the Force and Vigour of a *Kite* or *Carrion-Crow*, but to the Spirits of a chearful, joyful *Nightingale* or *Lark*: And I have labour'd it more, as to *Perſpicuity* and *Detail*, than that of any other *chronical* Diſtemper, becauſe

cauſe it is the *Lot* of the brighteſt, moſt acute, and penetrating *Genii*, and becauſe I intend it as a *Model* for all the more and leſs piteous Stages of this, or any other *chronical* Diſtemper; for ſlighter *Symptoms* and better *Circumſtances* of this or theſe Diſorders, will require leſs Time, Attention or Exactneſs in their Cure; for it is undeniable,

Quod poteſt majus, poteſt minus,

BUT here I beg the Reader to attend, that I by no means intend theſe *Directions* and *Methods* for the *Strong* and the *Robuſt:* Their *Medicins* and *medical Operations*, to do them any Service, muſt bear a Proportion to their own natural Strength, and the Obſtinacy or Painfulneſs of the Diſtemper. This Method would be to ſuch, like battering a *Fort* with *Popguns*.

CHAP. V.

Of the different Powers of Diet, *and of the Diſeaſes each* Kind *is capable to cure or eradicat.*

1. A Total Aſs-milk Diet (about two Quarts a Day, without any other Meat or Drink) will, in time, cure a *Cancer* in any part of the Body, with mere common Dreſſings, provided the Patient is not quite worn out before it is begun; or too far gone

in the common *Duration* of Life: And even in that Caſe, it will leſſen the Pain, lengthen Life, and make Death eaſier; eſpecially if join'd with ſmall interſpers'd *Phlebotomies*, *Millepedæ*, *Crabs-eyes* prepared, *Nitre*, and *Rhubarb*, properly managed: But the *Diet*, even after the Cure, muſt be continued; and never after greatly altered, unleſs it be into Cow-milk with Seeds *.

2. ANY *Cancer* that can be cut out, contracted and healed up, with common, *i. e.* ſoft, cool, gently aſtringent Dreſſings, and at laſt left as an *Iſſue* on the Part, by a Cow-milk and Seed Diet, ever after continued in, may be made as eaſy to the Patient, and his Life and Health as long preſerved, as if almoſt he had never been afflicted with it, eſpecially if under *Fifty*.

3. *A TOTAL Milk and Seed Diet*, gentle and frequent *Phlebotomies*, as *Symptoms* exaſperat, a little *Ipecacuhana* or *Thumb-Vomit*, repeated once or twice a Week, chewing *Quill-Bark* in a Morning, and a few Grains of *Rhubarb* at Night, will totally cure *Conſumptions*; even when attended with *Tubercles*, an *Hæmoptoe*, and *Hectic*, in the *firſt Stage*; will greatly relieve, if not cure, in the *ſecond Stage*, eſpecially if Rideing, and

* *Vide* Aſtruc *de Re Venerea.*

a warm clear Air, be joined; and make *Death* easier in the *third* and last *Stage*.

4. *A TOTAL Cow-milk Diet*, about two Quarts a Day, without any other Food, will, at last, totally *cure* all kinds of *Fits*, *Epileptic*, *Hysterical* or *Apoplectic*, (which are all but Degrees or *Symptoms* of one general Disease, which I call *Scorbutico-nervose*, or the plain *Scurvy*, in its last Stage) if enter'd upon before Fifty: But the Patient, if near Fifty, must ever after continue in the same Diet, with the Addition only of Seeds; otherwise his *Fits* will return oftener, and more severely, and at last cut him off.

5. *A TOTAL Cow-milk Diet*, without any other Food, will bid fairest to cure a *Hæmiplegia*, or even a dead *Palsy*, and consequently all the lesser Degrees of a partial *one*, if enter'd upon before Fifty: And this Distemper I take to be the most obstinat, intractable and disheartening one, that can afflict the human *Machin*; and is chiefly produced by intemperat *Lechery*, with its necessary Attendant habitual *Luxury*. It may be retarded in its Progress by strong *Vomits*, *Mercurial* and *fœtid Gum* Medicins, *Air*, *Gestation*, the *Pilulæ Æthiopicæ* of the *Edinburgh Dispensatory* of the last Edition, with Water Beverage, and Mineral Water, and cold or hot Batheing in the respective Seasons; but

but is never to be eradicated, if the Stroke is deep, or Life far ſpent, but by *Cow-milk* only.

6. *A TOTAL Milk and Seed Diet*, with gentle *Vomits* before and after the *Fits*, chewing *Bark* in a Morning and *Rhubarb* at Night, with *Phlebotomy* about the *Equinoxes*, will perfectly *cure* the *Gout*, in Perſons under Fifty, and greatly relieve thoſe further advanced in Life; even thoſe who have *chalky Nodes*, and *fix'd Joints*, eſpecially join'd with Air and Exerciſe, and ſtrong and conſtant *Friction*; but muſt be continu'd ever after, if ſuch deſire to continue well.

7. *SOAP-LEES*, ſoften'd with a little Oil of *ſweet Almonds*, drunk about a quarter of an Ounce twice a Day on a faſting Stomach, or *Soap* and *Egg-ſhell* Pills, with a *total Milk and Seed Diet*, and *Briſtol* Water Beverage, will either totally diſſolve the *Stone* in *Kidnies* or *Bladder*, or render it almoſt as eaſy as the *Nail* on one's *Finger*, if the Patient is under Fifty; and much relieve him, even after that Age.

Of all theſe mentioned Caſes and Cures, I have known or treated Inſtances, ſo that they may with high Probability, and *medical* Certainty, be depended on. The following are reaſonable and probable, but not ſo certain, for want of ſufficient Experiments.

8. *A*

8. *A TOTAL Milk and Seed Diet*, with cool Purges now-and-then, as of *Manna* and *Cream* of Tartar, or *Glauber*'s Salt, with a Pill of the *Præcipitat. per Se*, or Pills of the *Mercurius Alcaliſatus*, with *Terebinthina Cocta*, will, in ſix Weeks or a Month, totally cure and eradicat any *Venereal* Diſtemper in its *firſt Stage*, or while it is only term'd a *Gonorrhœa Virulenta*, without other *Symptoms*, if *Bark* and *Rhubarb* are chew'd for ſome time after, to conſolidat and conſtringe.

9. *A TOTAL Milk and Seed Diet*, continued for ſix or eight Months, will totally cure and extirpat *Venereal* Diſtempers in their *ſecond Stage*, (when they may be called the Great Pox, with *Bubo's*, *Cancers*, and *Cutaneous Defedations*) if Pills of *Præcipitat. per Se*, or of *Mercurius Alcaliſatus* and *Gum Guaiac*, with Dreſſings of the *Unguentum Neopolitanum* conſtantly applied, be join'd and conſtantly perſiſted in dureing that Time, which may be done without keeping Houſe, or Interruption of Buſineſs.

10. In thoſe who for the laſt Stages of *Venereal* Diſeaſes have unſucceſsfully gone through a full *Salivation*, a total *Milk and Seed* Diet, long and ſtrictly continued in, would certainly cure and eradicat the Diſtemper,

per, if no other *hereditary* Diſeaſe be complicated with it: Whereas, in the common Management, a total *Cure* is ſeldom to be obtain'd, and thereby many are miſerable all their Days.

11. AN habitual *Aſthma*, if managed with a *Milk and Seed Diet*, *Quickſilver* well purified half an Ounce twice a Day, *Squill Vomits* about *new* and *full* Moon, and after with the *Squill Pills* of the *Edinburgh Diſpenſatory*, might be totally eradicated; eſpecially if a Southern *Climate*, and warm clear Air, were join'd.

12. IN a painful and dangerous *Pleuriſy*, after a good part of the *Size* of the Blood has been drawn off by large *Phlebotomies*, and the Diſtemper, by *ſaponaceous* and oily *Emulſions*, with *volatil Alcalies*, is leſſen'd; if a *total Milk and Seed Diet* were inſtituted and duely perſiſted in, the *Blood* and Juices would in time thereby be ſweeten'd, and a Return, a *Phthiſis*, and an *Empyema*, be effectually prevented.

13. *A MILK and Seed Diet*, with Vomits of *Ipecacohana*, and a few Grains of *Tartar Emetic*, repeated every *new* and *full Moon*; in the Intervals, *Alcaliſatus*, and *Guaiac* Pills continued; and when the Blood is ſufficiently attenuated, and the Obſtructions opened,

opened, if *cold Batheing*, with *vegetable* Aſtringents, (Bark eſpecially) were imploy'd to finiſh the Cure, and the ſame Regimen ever after continued; this Method, I think, would ſooner, more pleaſantly, and more dureably, cure and extirpat all kinds of *Mania's*, *Phrenſies*, and *Madneſſes*, (which are ſo ſhamefully frequent in *Britain*) than the common one of treating them with tearing *Emetics*, and ſcrapeing *Cathartics*, under the uſual full ſtrong *Diet* of *animal Food*, which does but add Fewel to the Diſtemper; and generally the Diſtemper returns in a greater or leſſer Degree, to the Party or his Poſterity.

14. In any *Hæmorrhage*, either from the *Lungs*, *Noſe*, *Anus* or *Uterus*, how violent ſoever, if after ſome repeated *Phlebotomies* to moderat the *Flow*, the Uſe of *Eaton's Styptic* in *Briſtol* Water, or the *Tinctura Roſarum*, with *Bark* in *Subſtance*, *Extract*, or *Decoctions*, were freely adminiſtred, a *total Milk or Seed Diet* was ordered and duely proſecuted, it would totally cure theſe *Symptoms*, would at laſt ſweeten and *balmefy* the Blood and Juices, and prevent Returns. For all *Hæmorrhages* are of the ſame inflammatory and acrid Nature, differing only according to the *Part* where the *Rupture* of the capillary Vein happens, and ſuppoſe a thick *Curd*, and a ſharp *Serum* in the *Blood*.

15. *A*

15. *A JAUNDICE* (*black* or *yellow*) proceeding from a ſpoiled or obſtructed *Liver*, a viſcous or morbid *Bile*, or *biliary Stones*, which prevent the Separation of the *Choler*, and its Paſſage into the *Inteſtins*, by which means it is forced back into the *Veins*, is rarely and perhaps never to be totally cured and eradicated, but by a *Milk* and *Seed Diet*, frequent and active *Vomits*, *ſaponaceous Emulſions*, with *volatil Alcalies*, *mercurial* Plaiſters on the Region of the *Liver*, *Bath-waters*, and conſtant Rideing. This Method, I know from Experience, will perform a total dureable Cure, and otherwiſe I never ſaw it effected.

16. *A TOTAL Milk and Seed Diet*, with ſole Water *Beverage*, would at laſt cure and extirpat any Degree of the *Scurvy*, ſcorbutic *Ulcers*, and impoſtumated *Glands*, even the *Lepra Græcorum* and *Arabum*, or at leaſt make them infinitly eaſier and better, if duely continued, and *Æthiops Mineral*, *Cinnabar* of *Antimony*, or the *Aqua Argentea*, were join'd to it in a long Continuance.

17. IN every *Chronical* Diſtemper whatſoever, which always comes on gradually, with evident Symptoms, when it firſt ſeizes a Perſon, after *Bleeding*, a *Vomit* and a *Purge*, if the

the Patient abſtain'd ever after from all *fermented* Liquor, and drank nothing but pure Water, *cold* or *tepid*, according to the Seaſons, it would very probably cure him effectually, and ſecure againſt *Returns*, at leaſt if this Beverage was continued, whatever his ſolid Food ſhould be.

18. *TOTAL Water Beverage*, with ſome occaſional *Vomits*, on *Fits*, and once a Week *Hiera Picra*, *Tincture* of *Rhubarb*, or an *Anderſon*'s or *Ruffi Pill*, Two or Three, will totally cure, and at laſt preſerve from Returns, in any *bilious Colic*, let the ſolid Food be almoſt what it will. This I have always found certain, in Perſons of a tolerable good Conſtitution, not too far gone in Life.

19. *TOTAL Water Beverage* will rebate and leſſen the Violence of the *Fits* of the *Gout*, keep them long moderat and *regular*, and preſerve *Life*, *Limbs*, and *Spirits*, perhaps as long as the Conſtitution was made to laſt, whatever his ſolid Food ſhould be: And the ſame is true of the *Rheumatiſm*, after the *Fits* are leſſen'd by the Means afore directed; for the *Gout* is but a topical *Rheumatiſm*.

20. *FISH*, in general, is not near ſo high and inflammatory as *Fleſh*, unleſs they are exalted with high and rich *fleſh Meat*, and *ſpicy* Sauces; though ſome kinds of Fiſh, as *Salmon*,

Salmon, Carp, Sturgeon, Lamprey, &c. are higher than *Mutton, Veal, Lamb,* and *Chicken.*

21. OF all others, a total *Aſs-milk Diet* is the cooleſt, moſt ſweetening, and reſtorative poſſible: Next to *it,* is Cow or Goat-milk *Whey,* if not too flatulent or purgative. Cow-milk, boil'd or raw, for the whole Food, is next in Degree to thoſe. *Farinaceous* Seeds (as being young Vegetables without much Wind or Salts) are in the fourth Degree of Diet. To theſe ſucceed in the next Degree, the *farinaceous* Roots, as *Turneps, Potatoes, Parſnips,* &c. but are more flatulent and windy than Seeds. Higher than theſe are the *Pot-herbs* and *Salladin,* but ſtill more flatulent, even when much boil'd, eſpecially with the leaſt Butter. The higheſt of all *vegetable* Foods, are the Fruits, eſpecially the late Fruits, even *Apples* or *Pears;* for all theſe are *vinous,* almoſt as much as the *Grapes,* which *Grapes* will fuddle and madden *Apes* *, as much as Wine or Spirits will human Creatures: For it is a Miſtake to think, that nothing but fermented Liquors will fuddle and inflame animal Juice. The Juice of any *vinous* Vegetable, even unfermented, too plentifully ſwallow'd, will quicken the Pulſe, and ſo intoxicat Animals of very *elaſtic Solids:* For

* *Vide* The Hiſtory of the *Cape of Good Hope.*

neither

neither *Fermentation* nor *Diſtillation* makes Wine or Spirits; they only congregat them, as a Burning-glaſs does the Rays of the Sun; they are ſtill Lancets with a ſlight and thin Sheath.

22. HALF, or even a whole Pint of old defecated Wine, with half or even a whole Pound of any kind of Fiſh or Fleſh, to the Young, Strong, and Laborious, with the common Appurtenances of Bread, light Pudding, or Tarts, in Twenty-four Hours, (perhaps beſt divided into two Meals) with vegetable Foods for Breakfaſt and Supper, will preſerve the Young and Healthy till Forty.

23. LEAVING off Fleſh-meat Suppers with Wine, and eating only one moderat Fleſh Meal a Day, will probably preſerve any Perſon, not labouring under any chronical Diſtemper, in good Health, for the firſt ſeven Years after, before Fifty.

24. IF a Man after Forty, though in perfect good Health, begins not to ſtudy Regimen, and manage his Diet, at leaſt in Quantity, I conclude him neither *Phyſician* nor *Philoſopher*, let his other *Talents* be what they will; for he thereby truſts the Duration of his future *Life*, *Health*, and worldly *Happineſs*, to mere *Caſualty*, and blind *Chance*, as they are called.

25. MILD, ſoft, middling Malt Liquor is infinitly fitter for all *Britiſh* Conſtitutions, whoſe Appetit and Digeſtion is as yet tolerable, than any kinds of Wine, either Foreign or Home-brew'd; it will prevent the *Stone* and *Gout*, and almoſt all kind of *Inflammations*, and is far beſt for carrying on Old Age.

26. PROPER and well-tim'd *Evacuation* only, leſſens *Diſtempers*, and gives a tolerable Degree of *Relief* under them; as it removes *Impediments*, and gives room for *ſpecific* ſweet Juices from the *Chyle* of proper Food to be receiv'd into the Habit, to dilute and cool the vitiated Blood and Juices.

27. *ALTERATIVES*, even the *mild Ponderoſe*, and the *mineral Aſtringents*, much leſs the *cordial*, *volatil*, and *aromatic* Tribe of *internal* Medicins, do but very little towards the perfect Cure or *Extirpation* of any natural or internal *Diſtemper*. They may relieve, give a ſhort *Reprieve*, throw a little Weight into the Balance on the Side of the *Cure*; and ſo are not to be totally ſlighted, eſpecially in acute Caſes; but the *ſubſtantial* and *momentous* Part of the *Cure* lies here: Nature has ſo contriv'd the *Animal Machin*, that the Outlets of *Export* ariſeing from *Action*, *Exerciſe*, and the *Performance* of the *Ani-*

mal

mal Functions, are perpetually changeing and altering the whole *Machin*, *Fluids* and *Solids*, either into Better or Worſe, and in a few Years perform it: But the *Orifice* of this Animal Machin being larger than the *Sum* of all the *Outlets*, if Care were taken, that in that time nothing ſhould be receiv'd by the *Orifice* but what were in its own Nature *ſoft*, *cool*, *kindly* and *ſound*, *Time* and *Nature* would preſerve the *Animal* in Health, as long as the Materials of it were made to laſt; ſo that almoſt the Cure of Diſeaſes is brought to ſuch a *Problem* as this:

28. A *Veſſel* full of a *Lixivium*, or groſs Fluid, being given, which diſcharges itſelf by ſeveral *Outlets* at the Bottom, whilſt an equal (or perhaps ſomewhat a larger) Quantity of freſh *Water* flows into it from above, to find the *Time* when the *lixivious Mixture* remaining ſhall be leſs than any *given Quantity*.

29. Some perhaps may *controvert*, nay *ridicule*, the Doctrin laid down in theſe *Propoſitions*. I ſhall neither reply to, nor be moved with, any thing that ſhall be ſaid againſt them. If they are of *Nature* and *Truth*, they will *ſtand*; if not, I conſent they ſhould come to *nought*. I have ſatisfied my own *Conſcience*; the reſt belongs to *Providence*. Poſſibly Time and bodily Sufferings may *juſtify* them; if not to this Generation, per-

haps to some *succeeding one*. I myself am convinced, by long and many repeated Experiences, of their *Justness* and *Solidity*. If what has been advanced through this whole *Treatise* does not convince others, nothing I can add will be sufficient. I will leave only this *Reflection* with my Reader, *viz.* That all *Physicians*, *antient* and *modern*, allow that a *Milk* and *Seed Diet* will totally cure before Fifty, and infinitly alleviat after it, the *Consumption*, the *Rheumatism*, the *Scurvy*, and the *Gout*; these highest, most mortal, most painful, and most obstinat Distempers: And nothing is more certain in Mathematicks, than *Quod potest Majus*, *potest Minus*; or, what will cure the greater, will certainly cure the lesser Distempers; since it is self-evident, that all bodily Diseases arise from corrupted Juices, and spoil'd Solids.

Chap. VI.

Rules for preventing Infertility *in both Sexes, and* Miscarriages *in the* Female *Sex.*

1. THERE is no Nation in *Europe*, perhaps, where great and opulent Families sooner become extinct, or change Lineage so quickly, as they do in *England*; or where such Devastation of the Female Sex, especially among those of Rank and Condition, is made by Abortion and dangerous

gerous Child-bearing; and no-where is *Man-Midwifery* ſo neceſſary and profitable a Profeſſion. This Misfortune appears not to the Poor, the Neceſſitous, or thoſe of the *middling* Rank; for no-where is there a finer or more numerous Poſterity, than among the *Highlanders* of *Scotland*, or the *native Iriſh*; but to thoſe who have all the Conveniencies and Delicacies of Life in the greateſt Plenty and Perfection; and if *theſe* have *Poſterity*, they are often deformed, diſeaſed, ſtunted and ſhort-lived. This therefore can happen only from the Difference in their manner of *Living* and *Feeding*; unleſs we ſhould ſay, that impartial Providence compenſates the want of ſome Conveniencies to the *poorer*, by more conſiderable Advantages in another way.

2. It is certain nothing can produce *Fertility* in either Sex, but what promotes perfect *Health*: Nothing but *good Blood*, *Spirits*, and perfect *animal Functions*, that is, *high Health*, can beget perfect *Fecundity*; and therefore all Means and Medicins, all *Noſtrums* and *Specifics*, to procure *Fertility*, different from theſe, which produce *good Blood* and *Spirits*, are arrant *Quackery* and *Cheating*. This is evident from the *brute Animals*, who never can procreat, till they are *healthy*, *gay*, and *active*; and therefore the Rules I have adduced in the *former* Part

of this Treatiſe, for promoting or recovering *Health*, may, to Perſons of a *proper* Age and Circumſtances, be looked upon as ſo many Rules for promoteing *Fertility*.

3. I THINK it is now pretty evident, to every unprejudiced Perſon, who is ever ſo little acquainted with the beſt natural *Philoſophy*, and the lateſt Diſcoveries in natural *Hiſtory*, with the Uſes of the reſpective *Organs*, in the different Configuration of the *Males* and *Females*, together with the plaineſt and moſt certain Laws of *Analogy*, that the *Principle* of Generation, or the *infiniteſimal Corpuſcle* of the *Animal*, is in the *Male*; and that the *Female* is only, as it were, the primary *Nurſe* to it, furniſh'd with a proper *Nidus* and the *ſpecific* Nutriture for it, for a certain Time, till it has acquired Strength enough to bear its own proper *Element*; which State it no ſooner attains to, than it breaks its Priſon, and eſcapes. This is the Uſe of the different *Configuration* of the *Sexes* when divided; and an *analogous* Proviſion for the ſame Purpoſe is provided for thoſe *hermaphroditical* Animals, whoſe Situation and Nouriſhment makes it neceſſary they ſhould be ſo. No *Sperm* hitherto examin'd by the *Microſcope*, after *Liquefaction*, but diſcovers theſe *infiniteſiminal Animalculi* many *Millions* of times leſs than the ſmalleſt Hair, *liveing*, *moveing* and *playing* in the *pellucid*

pellucid Fluid; and if it is not ſo, no *Generation* ever follows. Theſe *Animalculi* we may juſtly ſuppoſe to have been originally form'd by the *immediat* and *omnipotent Word* of the *Author* of *Nature*; no *ſecond* Cauſes whatever haveing either Skill or Power enough to produce them in this their *infiniteſimal Parvitude*, and to be contain'd within one another in a *ſimilarly decreaſeing Proportion*, back to the *firſt Pair*: and originally lodged in ſome convenient *Cells*, near the *proſtate Glands*, or in ſome of the *Appendages* of the *Teſtes*, *analogous* to the Place of the *Ovarium* in the *Female*, till the *Male* has acquir'd ſufficient Vigour and Balm in his Blood and Juices, to ſecern a proper ſoft Fluid with a fine volatil Salt, to tranſmit them into the *Veſiculæ Seminales*, and thence to their *ſecond Stage* of Exiſtence, the *Female*. Their Multitude is only to ſecure againſt the poſſible Chances of ſome one or more not getting through the *Uterus* by the *Tubi Fallopiani* into the duly prepared *Ovum*, there endow'd with a convenient *Nidus* and *ſpecific* Nutriture, to increaſe them gradually to their due Magnitude and Strength, ſo as to be able to bear their proper *Element*. *Equivocal Generation*, by many repeated Experiments, has been proved *falſe* beyond a *Reply*; and the impregnated *Ovum*, with a *ſeminal Animalculum* in it, has been traced through the *Tubi Fallopiani* from the *Ovarium* to the *Uterus*.

Leuvenhoeck, in numberleſs *Sperms* of different *Animals*, (if healthy) has conſtantly obſerv'd by his *Microſcopes*, theſe *Animalculi*, with all the Evidence and Certainty of the *Senſes*; and *Malpighi* has diſcovered in *Hen-Eggs*, the daily gradual Progreſs of the *Cock-tread*, from its *Punctum Saliens* in the *big End*, till it broke the *Shell* in a perfect *Chicken*, and accurately deſcribed all its Appearances; none of which was to be found in thoſe which were ſet a Hatching without the Concurrence of the *Male*. After ſo many and accurat *Experiments* made by *Naturaliſts*, there can remain no Difficulties in this *Syſtem*, with thoſe who fully underſtand the *infinit Diviſibility* of Matter, or whoſe *Imagination* is not very groſs, vitious, or limited.

4. If this *Syſtem* be the true one, as I certainly think it ſo in the main, it will be very evident, that *Luxury*, *intemperat Lechery*, *inflammatory* and *bilious* Blood and Juices, may deſtroy and kill theſe *Animalculi* in their primitive Cells, or the Heat and Acrimony of the Fluid, in which they are tranſmitted, may burn them up, before they reach their proper *ſecondary Station*. With the luxurious and hot-headed *Males*, this is almoſt conſtantly the Cauſe of *Infertility*, though the Blame is commonly laid on the more temperat, cool and healthy *Females*. It is certain

tain from *Philoſophy* as well as *Obſervation*, that ſole Water-drinking Males are very rarely *infertil.* I remember Dr. *Taylor*, the *Milk-Doctor* of *Croyden*, (whoſe Caſe I have narrated in the *Engliſh Malady*) pointed out to me two or three opulent Families in his Neighbourhood, who after Marriage had continued ſeveral Years without *Poſterity*, and were extremely ſolicitous about it; and whom in two or three Years time, he had brought to have ſeveral *fine Children*, by keeping both Parents, all that time, to a total *Milk* and *Seed Diet.* This he moſt ſolemnly averr'd to me, and we know, that even old *Homer* had obſerv'd, that the Feeders on Milk were the *honeſteſt* of Men.

Γλακτοφάγων Ἀβίων τε, δικαιοτάτων ἀνθρώπων.

5. I OWN in this Caſe, I am much more concern'd for the *Female* than the *Male Sex.* The *Males* having ſtronger, but coarſer, both Bodies and Faculties, by their Licentiouſneſs and Luxury, often bring on their own Sufferings, and bodily Misfortunes; whereas the *Females* in general, having weaker, but more delicat and pliable Bodies and Spirits, and tied down by Cuſtom, and the *Tyranny* of Men, to many Reſtraints, (which Men inſolently deſpiſe) are more *temperat*, *abſtemious*, and *modeſt*; and ſuffer at leaſt in this Life, infinitly more in the *Oeconomy* of *Childing* than Men; not only from the Pains and Anxi-

Anxieties of *Breeding* and *Child-bearing*, but from the innumerable Accidents of *Miſcarriages*, and being ſubject to the *Wildneſſes* and *Caprices* of debauched Husbands; by all which they often ruin their *Conſtitutions*, and ſhorten the *Duration* of their Lives; and, at beſt, paſs through a much more ſevere State of *Purification*, than Men, for the general, do; and yet, if I were called upon, I could take my *Oath*, if there be any thing real or valuable in Virtue, that in the *Compaſs* of my Acquaintance, (of the ſame Degree of Virtue, or Freedom from Vice) I have known *ten* good Women, for *one* equally good Man; though I own an *abandon'd* Woman is extremely bad; for *Corruptio optimi eſt peſſima*. The Deſign of this *Chapter* is ſolely to ſuggeſt to that more innocent and delicat Part of our *Species*, all that comes within the Compaſs of my Experience, Obſervation or Knowledge, to cure or relieve the ſeveral Diſorders or Inconveniencies that attend them in this *State* of their Lives.

6. It is a common profane *Joke*, of ignorant and low Wits, upon the *Hyſterical*, and *green biliary Complaints* of the *Sex*, that *Concubinage* or *Matrimony* would be the beſt Remedy for theſe Diſorders: But theſe kinds of *Sneerers* underſtand as little of *Nature*, as they do of *Religion*. Tender young *Females*, with *hyſterical* and *green biliary* Complaints, upon

upon *Conception*, during the time of their *Pregnancy*, may ſometimes, at leaſt as they grow *big*, get better *Appetits* and *Spirits*, from the long precedeing Inappetency, frequent *Reaching*, and from the *Fœtus* drawing off the *Superfluity*: But, alas! this will be but a ſhort and precarious Reprieve; for after *Child-bearing*, or, what more generally happens, after an *Abortion*, the ſame *Symptoms* return with doubled Violence; and when they begin to *miſcarry*, they generally go off in a *Decay*, a *ſlow Fever*, *Fits* and *Convulſions*; whereas, had they forborn *Matrimony* till they had mended their Conſtitutions, by the Rules laid down in the fourth Chapter of this Part of the Treatiſe, (being ſuppoſed young) they would have ever been free from the mentioned Inconveniencies.

7. I HAVE hinted at the chief Source of *Infertility* in the *Male* Sex, which, beſides Accidents and a *Mal-formation*, is chiefly owing to the *Luxury* of the Individual himſelf, if he has been born ſound, or has not deriv'd corrupted Juices from his *Parents*: In all which Caſes, nothing will reſtore *Fertility*, but what mends the Conſtitution, the *Rules* for which I have laid down, with great Plainneſs, in this *Treatiſe*. The *Infertility* of the *Female Sex* is owing to one of theſe three *Cauſes*. 1. A too great *Flux* of the *Menſtrual Purification*, for which the proper

Cure

Cure is directed above, under that *Symptom*. 2. From too ſmall a *Flow* of the ſame, (which, I think, in a *Medium*, ought to be about two Ounces) for which alſo the *Remedy* is ſuggeſted under the Head of *Obſtructions*: Or, 3. From a Weakneſs that happens in the Intervals of the *Menſtruations*, called the *Fluor Albus*, deſcribed and preſcribed for above likewiſe. Frequent *Miſcarriages* attend all theſe *three* Cauſes, often at all times, but moſt commonly between the *third* and *fourth* Month, when the Weight of the *Fœtus* is too great for the *contractive* Powers of the *Uterus*, whereby it is forced away before its due Time; which is a plain and manifeſt Symptom of tender and relaxed *Nerves* and Solids in the Mother, and which ought to be a Warning to *both Parents*, to ſet about all poſſible Means to ſtrengthen and brace the Solids, at leaſt of the Mother, in order to prevent the future Progreſs of this *Imbecility*; which Means, the beſt known to me, and the moſt rational and ſucceſsful I have obſerved or read of, I intend now to ſuggeſt.

8. When a married young Woman begins to miſcarry naturally, and without any Accident, ſhe rarely goes on after to the full Time, but miſcarries regularly every three or four Months, till either ſhe gives over Breeding, or is cut off by the Frequency of the *Miſcarriage*, and its Conſequences. In which Caſe,

Caſe, were there no other Reaſon, as ſoon as it can be ſafely done, ſhe ought to be blooded ſix or ſeven Ounces, out of a large Orifice at the Arm, to examin into the State of the *Blood* and *Viſcera*, and if the *Curd* of the Blood be found ſizy or liveriſh, (as I could venture my Life it will in ſuch a Caſe generally be) ſhe will never bring a *Child* to its full Time, whatever the Appearances of Health in the Mother be otherwiſe, till the Blood be thinned and *balmified*, which can only be done the ſooneſt, by little *Phlebotomies*, (of about two Ounces) every Month immediately after the *Menſtruation*; the mild *Ponderoſe*, *Cinnabar* eſpecially, twice a Day, about 40 Grains or more for the *Doſe*, waſh'd down with Aſſes Milk or *Orange-whey*; good Hours, gentle Exerciſe, a white Meat Diet, with a little *French* Claret in *Briſtol* Water, Milk-porridge only for Supper, cold Water *Friction*, and the other Rules formerly given for *braceing* tender *Nerves*, and mending bad Juices; which will be ſooner effected in the Young, as theſe muſt be. By this Method I have often cured *Infertility* in the *Sex*, and prevented *Abortion*, and improved their Conſtitution, when the Blood and Conſtitution has not been very bad. But upon this Examination of the Blood by *Phlebotomy*, if the *Curd* is found to be thin, wateriſh, and too ſoft and ſpungy; then real *Cold-batheing* long continued, *vegetable* Aſtringents, the *Bark* eſpecially,

cially, drinking *Tunbridge* or *Spa* Water in the proper Seaſon on the *Spot*, will be found to ſucceed beſt.

9. But if the Conſtitution be ſo weak, *lax* and *delicat*, that even this Method will not carry them on to their full Time; then nothing is ſo likely to do as *ſole* Water-drinking: Common Water, with a little Milk, and tepid *Spa* or *Briſtol*, and animal Food, the youngeſt and lighteſt, and at Noon only, and Milk Meats (*Aſs's* or *Cow's*) for Breakfaſt and Supper, during the whole Time of their *Pregnancy*. *Wine* and all fermented Liquors, give too great a Velocity to the Blood, puſh it onwards with too ſtrong a *Momentum*, force open the *uterin* Veſſels, and drive off the *Placenta* from the *Fund* of the *Uterus*, by opening the *Sphincters* of the *menſtrual* Flux; ſo that the *Fœtus* muſt neceſſarily come off, which is never to be retain'd by *Art* or *aſtringent* Medicin, after the parturient Woman finds a Tendency in her Bowels to part with it. All that can be done then, is by gentle *Forcers* or *Volatils*, together with ſoft *Oils* and *Balſamics* united to mild *Opiats*, to quiet Nature; and leaving her to her own *Play*, patiently wait her Time and Manner; for, to uſe *Aſtringents* in ſuch a Caſe, is like ſetting the Room on fire, and locking the Door.

10. If

10. If this Method ſhould alſo prove unſucceſsful to procure *Fertility*, and prevent *Abortion* in tender young married Women, as it often does in thoſe who are tolerably healthy; a *total Milk* and *Seed Diet*, rigidly continued for a Year or two, cannot fail; eſpecially if due Care of the other Non-naturals be added, half a Drachm of the *Bark* be chew'd and ſwallow'd in the Morning and before Supper, or Pills be made of the *Extract* to the ſame Value, and once or twice a Week ten or fifteen Grains of *Rhubarb* be taken over Night, during all the time of the *Pregnancy*. I have ſeen the fineſt Children come, under this *Regimen*, I ever beheld; and I am fully perſuaded, if any thing in Nature can prevent *Infertility*, and bring fine Children, it is a *Milk and Seed Diet*, continued both by *Father* and *Mother*, till the Effect be produced. This *Regimen* ſecures the Health of the Children, if they come, it being the ſame, Nature puts them under as ſoon as they ſee the *Light*; and cures all the Diſorders they may happen to receive from diſeas'd Parents in their *Formation*; and if it does not cure the *Infertility* of the Parents, it certainly mends their Health and Conſtitution.

11. But if the Deſire of *Poſterity*, ſo natural to young-married Women, ſhould not prevail with them to enter upon this cool, ſoft, wholſome *Regimen*, I mean a *total*

Milk

Milk and Seed Diet; yet there is one Argument which I think could not fail in that *Sex*, which is, that I can aſſure them upon my *Credit* and *Veracity*, that it is the only Method known or knowable to Mankind, to preſerve and improve the *Beauty*, *Cleanneſs* and *Sweetneſs*, of the *Tender* and *Delicat*, far beyond *Quickſilver*, which the Mothers of the *Georgian* Daughters give them, to improve their *Beauty*, for a long time, before they enter in the *Seraglio's* of the great Men of *Aſia*. Theſe young Ladies, who are ſo anxious to preſerve their *Faces*, *Complexions* and *Shape*, that they often endanger their *Healths* and *Lives* on that *Score*, will find this *Regimen* far beyond the *Paint* and *Spaniſh Roùge* and Colouring, (which always at laſt deſtroys the Delicacy of the Skin, and the natural Beauty) and yet is ſo univerſally practis'd now for that End. *Scorbutical*, *Icteric*, and *Biliary* Conſtitutions, may for a while look *pale*, *languid*, and *ſallow*, under ſuch a *Regimen*; but in time all theſe mortifying *Symptoms* will evaniſh, and an inimitable *Bloom*, *Bluſh*, and *Brightneſs*, will ſucceed, infinitly beyond all the Colouring of *Art* or *Paint*. There is no Beauty like the *Bloom* of Nature in perfect Health: Such a *Regimen* duely continued, heightens the *Scarlet* of the Blood, ſweetens and thins it, ſo that it is able to *circulat* freely through the *tranſparent Scarf-Skin* in its leaſt and laſt *Capillaries* and *Meanders*; and at the ſame time *thins*, *ſmooths*,

ſmooths, and renders the *Cuticule* ſo *tranſparent*, that the *Vermilion Bluſh*, and its own natural and healthy *Whiteneſs*, becomes perſpicuous. This I moſt certainly know, not only from Reaſon and *Philoſophy*, but from repeated *Facts* and *Experiments*, haveing recovered, preſerved and improved by this *Regimen* duely continued, the Beauty of ſome of the fineſt Women in *England*. But they muſt not be diſcouraged, if upon ſhort *Trials* the Effect is not produced, for at firſt it may happen quite otherwiſe: But let them have but Patience and Perſeverance, I will venture my *Fortune* and *Life* on the Succeſs at laſt. Had *Agrippina*, who every Day bathed herſelf in a Tub of *Aſs's* Milk, to preſerve and increaſe the *Smoothneſs*, *Softneſs*, and *Delicacy* of her Skin, made *this*, or *Cow's Milk* with *farinaceous* Seeds, her only Food, and with this had fomented the *Inſides* inſtead of the *Outſides* of her Veſſels, ſhe had accompliſhed her Purpoſe with infinitly greater Efficacy and Succeſs. But what need of *Arguments* to prove this Fact, ſince every one's *Senſes* can witneſs to the Beauty and Comelineſs of healthy young Children, and *Dairy-Maids*, who are fed moſtly after this manner?

12. If a married young Lady under a common temperat Diet, ſhould find herſelf apt to miſcarry, beſides avoiding as far as ſhe can, all *Surprizes*, *Frights*, and ſhocking *Sights*, all

violent Exerciſe, and every Exceſs of any Kind, it would help her much, if ſhe loſt about two, at moſt three Ounces of Blood at the Arm, near about the time ſhe uſed to be out of Order, at leaſt for the firſt three, or four, or five Months, after ſhe has reaſon to believe ſhe is breeding, which the firſt miſſing her *Ordinary*, ought to certify married young Women; by which ſo ſafe and ſmall a Loſs of Blood, its Force and *Momentum* downwards will be abated, and a Miſcarriage prevented: But Care ſhould be had, that this ſmall *Phlebotomy* be not carried on after the fifth Month; for then the Danger of *Miſcarriage* leſſens, unleſs it be by Accidents.

13. YOUNG married Women, on breeding, generally after miſſing the firſt *Return*, are very apt to turn ſickiſh in a Morning, *reach*, and throw up wateriſh *Phlegm* and *Choler*, eſpecially if they have been plentiful and free Feeders, which often forces an *Abortion*. I know no Remedy ſo effectual for this, as the *Thumb-Vomit* above deſcribed, which, without Violence, diſcharges the Stomach of this ſuperabundant *Phlegm* and *Choler*, and ought to be daily, and every Morning, *repeated*, till this *Symptom* ceaſes: Half an Hour after, drinking a ſmall Glaſs of tepid freſh *Spa-water*, with ten Drops of *Elixir* of *Vitriol*, and at Night, at leaſt two or three Days in a Week, taking ten or twelve

twelve Grains of *Rhubarb*, wash'd down with a Glass of the same Water, with a Spoonful of Claret: These ought to be continued dureing all the Time of this breeding Sickness.

14. A *TEA* made of *Jesuits-Bark*, *Misleto*, *Orange-peel* and *Cinamon*, on *Bristol-water*, three, four, or five Spoonfuls of this, taken two or three times a Day, on an empty Stomach, is an excellent *Cordial* against the Lowness of Spirits common to *breeding* Women, and also an excellent *Antidot* against *Miscarriage*; or an Ounce of *Bark* and *Rhubarb*, with a *Drachm* of *Salt* of *Wormwood*, infus'd in eighteen Ounces of *French* White-wine, strain'd and filtred, four Spoonfuls, more or less, as it operats downwards, is an excellent Remedy, taken every other Night, both against the Sickness incident to *breeding* Women, and also against Abortion, and prevents too obstinat Costiveness, which is often the Cause of it.

15. GENTLE *Friction* with a warm *Flanel*, and after washing the whole Body over with *tepid* Water, before a good Fire, the *Rupture-plaister* kept constantly to the Back, a broad *Girdle* of Cotton applied about the Middle, good Hours, chearful Company, and, in a Word, every thing that is proper to promote Health and good Spirits, ought to be attended to, by tender and delicat Breeders;

for one *Miſcarriage* hurts the Conſtitution, and weakens the *Nerves*, more than two full Births.

16. It is a *vulgar Error* to confine tender breeding Women to their *Chambers*, *Couches*, or *Beds*, dureing all the Time of their *Pregnancy*. This is one of the readieſt ways to make them *miſcarry*; it is like the common Advice of ſome unskilful Perſons, to ſuch as have *anaſarcous* or *dropſical* Legs, *viz.* to keep them up in Chairs on a Level with their Seats, which is the ready way to throw up the Humours into their Bowels, and fix them there. The only ſolid and certain way to prevent *Miſcarriage*, is to purſue all thoſe *Means* and *Methods* that are the likelieſt to procure or promote good Health, of which *Air*, and *gentle Exerciſe*, is one of the principal. All Violence or Exceſſes of every kind are to be carefully avoided by the *Parturient*; but freſh *Air*, gentle *Exerciſe*, walking, being carried in a *Sedan* or *Chaiſe*, on even Ground, is as neceſſary as *Food* or *Reſt*; and therefore is never to be omitted, when the Seaſon will permit, by tender Breeders. If theſe Rules, judiciouſly applied, and ſtrictly followed, will not prevent *Infertility* and *Abortion*, I fear nothing will.

Chap. VII.

Rules for obtaining and preſerving Health in the Decline *of* Life; *or for ſecuring a* Green Old Age.

1. AS there are few *Individuals*, who have not ſufficient Reaſon to conclude, that at about the Age of Forty-five, or Fifty, they have paſſed the *Meridian* of Life, and are ſtepping *down Hill*; the whole Space of Time (be it more or leſs) which is allotted to them between *this* Seaſon of Life and the Hour of Death, will, by a reaſonable thinking Man, be called *Old Age*. It is, as it were, the *Twilight* of Life, or a *ſecond Childhood*, with this eſſential Difference however, from the *firſt Infancy*, that in *This* the *Faculties* and their *material Organs* are uncultivated, unextended, and want their *Perfection*; whereas in this *Second*, the *Faculties* and the *Senſes* likewiſe may, by a wiſe and prudent *Oeconomy*, be ſupported to the very laſt Stage of Life, in *Vigour* proportionat to their earlier *Cultivation* and Improvement; and hence it is, that I call *Old Age* the *Twilight* or *Evening* of *Life*; and, to carry on the *Metaphor*, I further obſerve, that if the earlier Years have been ſpent in *Health* and *Innocence*, this *Evening*, like that of a *Summer's* Day, will be calm and

ſerene, nay ſweeter and more delightful than the precedeing *Day*.

2. WERE our Views to be carried no further than the narrow *Circle* of ſeventy or eighty Years, this Calmneſs, this *Serenity*, ſo much to be wiſhed for, would ſurely invite every thinking Man, who had his own *Happineſs* in View, to ſtep forward in that *Path* of Life which Nature itſelf has evidently pointed out to him; and if we carry our *Ideas* beyond this narrow *Circle*, and contemplat a *future Exiſtence*, is it not *Madneſs* to deviat from a *Path* which leads to an happy *Eternity?*

3. THE irkſome Experience which I have had of Multitudes of thoughtleſs unhappy *Individuals*, who by their Folly and Luxury have weakened the *primary Powers* of Nature in their own Conſtitutions, who without any ſevere *Chronical* Diſtempers or Accidents have, as it were, wilfully made themſelves wretched, is a ſufficient *Call* to me, to point out to my Fellow-Creatures the beſt *Rules*, which I am capable of laying down, for obtaining and preſerving Health in the *Decline* of *Life*, a lively rational *Head* under *Silver Hairs*, and a vigorous active *Heart* to animat even a feeble decaying *Trunk*.

4. NOW

4. Now one of the moſt effectual Methods which a wiſe Man can purſue, in order to obtain the *Bleſſing* of what I call a *Green Old Age*, is to begin at leaſt at the Age of Fifty, to leſſen his daily Suſtenance of *Meat* and *Drink*, both in *Quantity* and *Quality*, but eſpecially in the *firſt*. I have, in my *Eſſay* on *Regimen*, demonſtrated that about this Time the great *Criſe* or *Climacteric* of Life generally happens in both *Sexes*. Then it is, that the Blood and the Juices of the moſt Healthy and Strong begin to *cool*, to *thicken*, to become *vapid*, and to be *obſtructed* in the *Capillaries* and *Lymphatics*; many of which Veſſels, by ſuch *Obſtructions*, coaleſce and become *cartilaginous*, the *Perſpiration* is leſſened, all the ſeveral *Secretions* are rendered leſs *perfect*, all the *Solids* grow ſtiff and hard, and loſe their *Elaſticity*, and the *Circulation* is gradually reduced into a narrower Compaſs, approaching ſtill nearer and nearer to the *Trunks* of the Blood-veſſels, or their firſt Branches.

5. At this Time it is, that an obſervant *wiſe Man* will diſcover, that his *Vigour* is paſt the *Meridian*, and begins to *decline*; and this Diſcovery will *dictate* to him a Neceſſity of takeing ſuch Meaſures, as may render the *Progreſs* of *Old Age* as *ſlow* as his Nature will admit of; and ſuch as may contribute

to the Continuance of his Eaſe and Happineſs, and the Preſervation of his *Senſes*, and his *Faculties*, in all the Perfection that can reaſonably be hoped for.

6. Now I am perſuaded, this deſireable *End* cannot, by human Means, be attained, without a gradual Diminution of his *Meat* and *Drink*, and this both in *Quantity* and *Quality*, eſpecially in the *Firſt*; and this is a Rule which muſt be practiſed by the Man who is turned of Fifty, and is deſirous of living to Seventy or Eighty. It muſt be ſtrictly and uniformly purſued, and he muſt reſolve to be deaf to the *Calls* of craving Appetites, which, at this Time in Life, are uſually ſo depraved by *Prejudice*, *Example*, and *Exceſs*, that their Judgment is *falſe*, and their Dictates *deſtructive*, when they point out the *Quality*, or direct the *Quantity*, of his Food.

(a Venetian Nobleman)

7. *CORNARO*, who was poſſibly a ſingle Inſtance, amongſt Men of Rank and *Affluence*, of a long Life, high Health and Spirits to the *laſt*, ſecured theſe valuable Bleſſings by the mere Force of *Regimen*, even after a luxurious, and conſequently an unhealthy and diſpirited *Youth*. At Forty, he began to curb his Appetites, and to manage his *Diet*, which, after ſeveral *Eſſays*, he fixed at twelve Ounces of ſolid *Food*, and fourteen of

of *Wine*,* in twenty-four Hours; from this Time, (*viz.* the Age of Forty) gradually leſſening his *Diet*, till he reduced it to the Yolk of an Egg (*i. e.* about an Ounce of ſolid Food in twenty-four Hours, and probably did the ſame by his *Wine*). He enjoyed a perfect State of Health, and was at the ſame time happy in *high Spirits* to the Age of an Hundred, or, as ſome Authors ſay, an Hundred and Twenty: A very extraordinary Inſtance this, in a Man of *Cornaro*'s *Rank* in *Life*, who had in his Youth indulged in *high* Food, and *rich* Wine. Now it is highly probable, that from the Time of the firſt Reduction of his Food ſo, at the Age of Forty, he muſt gradually have leſſened the daily *Quantity*, about two Ounces every ten Years, till he had at Length reduced it to an Ounce a Day. The happy Reſult of this gradual *Reduction* ſhews, that he muſt naturally have had very ſtrong Solids: For I am quite perſuaded, that if inſtead of this *ſtinted* Quantity of *animal* Food, he had, at the Age of Forty, confined himſelf to Cow's Milk and Bread, to Vegetables and Water only, he might probably have lived to a much greater Age, with a clearer *Head*, and higher *Spirits*; for the ſovereign Method of prolonging Life is to preſerve the Blood in a *thin*, *ſweet* and *balmy* State, by which only the *Circulation* can be kept ſufficiently extenſive and full, through the various *Meanders* of the *Capillaries*,

* The Editor of Cornaro's "Diſcourſes on a ſober and temperate Life", publiſhed in Boſton, New England, in 1814, ſays in a Note — "A weak but pure Wine, for which ale (ſmall) beer, or water, may be the beſt ſubſtitute in this country!" —

laries, and all their delicat *Circumvolutions* in the *Glands*: For natural *Death*, by reaſon of Age only, is the neceſſary Reſult of thickening the Blood, which gradually leſſens the Extent of, and finally ſtops, the *Circulation*, even in the Trunks of the Veſſels.

8. It is now about ſixteen Years ſince, for the laſt time, I entered upon a *Milk* and *vegetable Diet*. At the Beginning of this Period, this light Food I took as my Appetite directed, without any Meaſure, and found myſelf eaſy under it: After ſome time, I found it became neceſſary to leſſen the *Quantity*, and I have laterly reduced it to One half at moſt, of what I at firſt ſeemed to bear; and if it ſhall pleaſe God to ſpare me a few Years longer, in order to preſerve in that Caſe, that *Freedom* and *Clearneſs* which by his *Bleſſing* I now enjoy, I ſhall probably find myſelf obliged to deny myſelf *One half* of my preſent daily Suſtenance, which preciſely is *three Wincheſter Pints* of new Cow's Milk, and *ſix Ounces of Biſcuit* made of fine Flour without *Salt* or *Yeſt*, and baked in a quick *Oven*.

9. Moderat *Phlebotomies* to ſuch as can bear them without Fainting or great Lowneſs, eſpecially ſuch as have ever by a common temperat Diet preſerved a robuſt *Conſtitution*, will greatly aſſiſt in procuring a *Green Old Age*; for Death (as I have already ob-

obſerved) overtakes the temperat Man *lento pede*, by ſlow and gradual Advances, by thickening from time to time the Juices, *viz.* the *Curd* and *Serum* of the Blood, and thereby obſtructing firſt the *Capillaries* and *Lymphatics*, and then the firſt Branches, and laſtly the *Trunk* Veſſels themſelves. Now moderat and frequent Loſs of Blood keeps the Veſſels always *roomy*, and draws off more of the thick and viſcid Juices, and in a greater Proportion than of the fluid and good Blood, as I have before ſhewn.

10. If *proper*, light, and wholſome Food, ſuch as is eaſily digeſted, be taken in the ſmalleſt Quantities that can prevent the *Anxiety* of Hunger, the kindly Chyle from thence drawn will keep the whole Maſs of Blood cool, thin, and ſweet, longer and better than any other Method of *Diet*, which, in my Judgment, Art can ſuggeſt. Now in order to render this *Regimen* eaſy and familiar to the Patient, he ſhould enter upon it at the Age of Fifty, at leaſt before he is Sixty, that the Change from higher Feeding may not be attended with Fainting, or too great Lowneſs. I have at this time a Patient upwards of Eighty, in perfect Health and Serenity, who yet has ever been of a delicat and tender Conſtitution, whoſe preſent eaſy and happy State ſeems to be the Conſequence of drawing ſeven or eight Ounces of Blood about once

once in two or three Months; and. in Fact, I have found, that frequent moderat *Phlebotomies*, (for Inſtance, once every Quarter of a Year, or at leaſt in the Spring and at Autumn) when they can be borne without Faintings or ſubſequent Lowneſs of Spirits, will greatly contribute to the Preſervation of Life, and afford a reaſonable Proſpect of a *green* and *ſerene Old Age*.

II. ANOTHER Method of procureing theſe *Bleſſings* is to promote and encourage *Perſpiration*. Now in old Men, from the Weakneſs and Slowneſs of Digeſtion, by a Contraction of the *Chanels* for Circulation, (many of the ſmaller Veſſels becoming ſolid) and by a conſequential *Laxity* of all the *motive* Powers, the *Perſpiration* gradually decreaſes, the Skin grows dry and ſtiff, the *perſpiratory* Ducts are cloſed; and hence come *Wrinkles* in the *Skin*, and *Paleneſs* in the Face. Now the Encouragement of *Perſpiration* in every ſafe and proper Way, is the moſt likely Method of preventing (or at leaſt of retarding) theſe Effects of *Age*; and this may be done by frequent and powerful *Friction* over the Body, the Limbs, and *Spine*, (eſpecially in the Morning and at Night) with a *Fleſh bruſh*, a *rough dry Towel*, or a Piece of warm *Flanel*, afterwards waſhing, in the warm Seaſons, with a Towel wet in cold Water, and in the colder Seaſons, in

warm

warm Water. Let this be done before a clear Fire, and let the Patient after ſuch Operation put on a *Cotton* Waiſtcoat next to his Skin. But nothing will ſo effectually prevent this, as a total Milk and Seed Diet.

12. As to Medicins, the beſt known to me, as conducive towards a *green Old Age*, are theſe, *viz.* In cold Nights, half a Pint of warm ſmall Sack-whey, with forty or fifty Drops of *Spirit* of *Hartſhorn*, taken at going to Bed——a *Pill*, two or three, of true *Aſſa fœtida* taken early in a Morning, the Effect of which is to be felt the enſuing Night—— in want of due Reſt, *theſe*, or a Drachm of *Mithridate*, or half a Drachm, or forty Grains of old *Venice Treacle*, or Sir *Walter Ralegh*'s Cordial, waſh'd down with warm Sack-whey.

13. It will be highly beneficial to uſe all ſuch bodily Exerciſe as a Man in Years can with Safety bear; an Horſe, whilſt his Strength is equal to it; afterwards a *Chaiſe* or *Chariot*, in good Weather, or in bad let him walk an Hour in the Morning, the ſame in the Evening before Sun-ſet, and let his Walk be taken in a *ſheltered* Place. Thoſe who are unequal to theſe Exerciſes, may, however, uſe the *Tremouſſoir*, (or Chamber-Horſe) a *dumb Bell*, or an *Hammock:* For Exerciſe, in ſome Shape or other, muſt be had; and this may be adapted to the Time of Life, and the different Stages of a natural and neceſſary *Decay*.

14. To

14. To promote the great Point in View, a *chearful healthy Old Age*, nothing, in my Judgment, can more effectually conduce, than a ſerious Attention to the gradual Advancement of theſe *Stages* in Life, and a proportionat Regulation of Diet; and hence will it be highly adviſeable to drop, by Degrees, *ſolid* Food, and to ſlide into *Liquids* only. The ſtronger animal Food may, at firſt, be ſucceeded by weaker, ſuch as *Chicken* and *Veal*. Theſe, in Proceſs of Time, muſt give way to thin *Broths* made of *Vipers*, with *Veal* or *Chicken*; which muſt at length be laid aſide for *vegetable Soups*, (made with little Butter) and finally, half a Pint of *Aſs's Milk* for *Breakfaſt*, the ſame for *Supper*, and a Quart of ſweet *Cow's Milk* for Dinner, will, upon Experience, be found to be a Diet calculated to prolong Life, keep the *Head* clear, the *Spirits* free, the Perſpiration tolerably *full*, and Circulation pretty extenſive: And if this very abſtemious *Regimen* is not ſtrictly purſued, and craving Appetites muſt have ſome Indulgence; in ſuch Caſe, the *lighteſt* and the *leaſt* Food, which can prevent the Uneaſineſs of *Hunger*, will be found to be a *rational* and almoſt certain Method of procureing uninterrupted Health, and a *green Old Age*.

15. Another eaſy and efficacious Mean of obtaining theſe Bleſſings, is to go to Bed, and

and to riſe from it, early; the firſt by Eight or Nine o'Clock in the Evening, the latter by Six in the Morning, during the Summer Seaſon, and at Seven in the Winter; and the Prudence of ſuch Practice will appear, when it is conſidered, that at Night the Air is generally damp, heavy, full of *nitrous*, *arſenic* and noxious mineral Particles, which being *ſpecifically* heavier than its other conſtituent Parts, gravitat and deſcend the ſooneſt towards the Surface of the *Earth*, that is, in the firſt Hours of the Night; and from *theſe*, an early warm Bed is the beſt Defence: Now before the *Dawn* of Day, all this hurtful Matter is diſcharged and drops, and in the Place thereof the Air is impregnated with *balſamic* and fragrant Particles drawn from the lighteſt and ſweeteſt Vegetables; and *theſe*, early-riſing Perſons, of a tender and delicat Frame, ſhould ſtrive to enjoy, whilſt they are hovering, as it were, in the lower *Regions*, and before the Force of the *Sun* has carried them out of their Reach. Another beneficial Reſult of early Riſing is, that it affords Time ſufficient for the bodily Exerciſes above ſuggeſted.

16. It will be found neceſſary for a Man in Years, to endeavour to keep his Belly *firm*, and its Dejections *ſolid* and *formed*, as a proper Means of preſerving a due Tightneſs in the whole *Syſtem* of the *Solids* and the *Nerves*; and this can only be uniformly effected

effected by very moderat Meals on the lighteſt Food. Slipping Bowels in *Old Age* will deſtroy the Firmneſs of the *Nerves*, and Freedom of the Spirits, and ſoon bring on Lowneſs and Sinking, peculiarly hurtful to *Old Age*. This the wiſe *Hippocrates* well knew, when he warmly recommended to Men in Years a Firmneſs in the Bowels, which I would adviſe as a very eſſential Step towards an healthy *Old Age*. Now when an old Man, by endeavouring to preſerve this Firmneſs, finds that he becomes too *coſtive*, and that his Head is thereby *clouded*, or his Belly *tumefied*, (the uſual Conſequence of Overfeeding only) a ſmall Quantity of *Hiera Picra*, or *Tincture of Rhubarb*, one or two *Ruffi* Pills, or *Anderſon*'s Pills, taken over Night, will eaſily remove ſuch Uneaſineſs: And be it remembered, that all the *Openers* taken by *old Men* ſhould be of the warmer and more *carminative* Sort, becauſe the *cooler*, more *draſtic*, and quicker Purgers, are *flatulent* and *diſpiriting*, and after the Uſe of ſuch, the Bowels are apt to continue for a conſiderable time in a looſe, *flabby* State, a Conſequence to be eſpecially avoided by Men in Years; whereas the warmer and more *carminative* Openers leave the Belly tight and firm, the moderat Uſe of ſuch neither hurts the Appetite, nor ſinks the *Spirits*, and the Frequency of ſuch Aſſiſtance will be found highly beneficial in the *Decline* of Life.

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17. One of the moſt irkſome Conſequences of old Age, is *Wind* and *Flatulence*, ſo pent up in the Bowels, that by reaſon of a weak *Digeſtion*, and obſtructed *Perſpiration*, the Patient has not Force to throw it off. The moſt ſolid Cure of this Symptom is the *lighteſt* Food, and the *leaſt* in Quantity, which can ſecure him from the *Anxiety* of Hunger. Milk and Seeds have leſs of this Kind of *Wind*, than any other *Eatables*, and that which they have is of a gentler and ſweeter Sort. I cannot ſay, that in theſe Oppreſſions by *Wind*, I ever obſerved, any great Relief was to be had by the uſe of *Aromatics* and *Spices*, unleſs an *Aloetic* Opener was joined with them: They only attenuat, and do not expel Wind.

18. In great *Flatulence*, and frequent *Eructations*, nothing affords ſo quick and effectual a Relief as *Ipecacuana*, or *Thumb-Vomits*, as the Patient can bear them, and as the *Exacerbations* indicat, to pump up the *Wind*, and force it upwards or downwards, or through the *perſpiratory* Pores. After ſuch Operations, a Glaſs of generous *ſpiced Wine*, and at going to Reſt, or a ſmall Quantity of *Hiera Picra*, will have a good Effect; and afterwards chewing half a Drachm of *Bark* on an empty Stomach twice a Day, which will give Strength to the digeſtive *Organs* and the *Solids*.

19. ANOTHER Mean conducive to an healthy *Old Age*, is to keep the *Feet* and *Hands* eſpecially, as warm as poſſible, by *woollen Socks*, and *furred Gloves*. Theſe Parts being furtheſt from the *Heart*, the Source and motive Power of the *Circulation*, for this Cauſe an *old Man* ſhould never go to Bed with *cold Feet*; and if they are *chilly*, let him firſt warm them well before a clear Fire, or *bathe* them in warm Water, otherwiſe will his Sleep be ſhort and interrupted; and in cold and froſty Nights, let his Bed be well warmed with a Pan of clear Coals, ſprinkled with ſome *aromatic Seeds* or *Gums*; at ſuch times a Bag of *warm Sand*, or an *hot Iron*, in a thick woden Caſe, placed at the Feet of his Bed, and a Fire burning all Night in his Bed-chamber, will, each of them, contribute to his Health and Comfort.

20. HIS Bed-Chamber ſhould be of a *Southern* Expoſure; if poſſible, let it be well *ventilated* in the warmer Part of the Day, by opening the Windows; and let it be kept perfectly *ſweet* and clean, and this rather by conſtantly *rubbing*, than by *waſhing*.

21. A MAN in Years ſhould not chooſe his *Habitation* in a large and *populous* City, but rather in a *clear*, *dry*, and *ſandy* Country, and

and his Houſe ſhould be of a moderat *Elevation.*

22. LET his *Cloathing* be ſuch as may keep his whole Body in a State of due Warmth, and yet ſuch as is conſiſtent with Eaſe and Activity; and therefore the propereſt Cloaths are thoſe which are *light* as well as *warm.* Let his *Winter* Habit be put on *early* in the *Autumn*, and not laid aſide till late in the *Spring:* Let him guard againſt *North-eaſterly* Winds, and *foggy Froſts:* Let his *Fuel* be Wood, if poſſible; if not, *Coals* which are the leaſt *ſulphurous*, moſt *pitchy* and *reſinous:* Laſtly, let him avoid *ſmoaky* Rooms, and *foul* Chimneys.

23. *ÆTHIOPS Mineral*, and *Jeſuits Bark*, ſeem to be, and are Medicins excellently calculated for the Preſervation of Life and Health; the *firſt* for thoſe who are originally robuſt, and who perſevere in the common Uſe of Meat and Wine, in Quantities fitted, though, to their Time of Life; theſe may, by proper Doſes of *Æthiops Mineral*, be kept moderatly open, and their Blood preſerved in a State of *Sweetneſs* and *Fluidity.* The *latter* of theſe Medicins, the *Quinquina*, chewed (about half a Drachm in Quantity) on an empty Stomach, and ſwallowed, its *Extract* in Pills, or the groſs Subſtance in *Wine* or *Tea*, will brace and ſtrengthen the *Solids* and

Nerves; a *Regimen* which ſhould commence at the firſt Approach of Old Age, and be continued conſtantly, at leaſt *Spring* and *Fall*, to the very laſt *Stage* of Life. To the Tender, Delicat, and ſuch as are unhappy in weak and *lax Nerves*, the *Bark* is the beſt and ſafeſt of all the vegetable *Reſtringents* and *Bracers*; all its Qualities are probably not yet diſcovered. When it is properly choſen, thin and quite freſh, rightly prepared, and duely doſed, I take it to be not only the beſt *Febrifuge* in all *Intermittents* and *Remittents*, but likewiſe the beſt *Antihectic*, the beſt *Styptic*, a Stopper of *Mortifications*, with a Regimen, *Anaſarca's* and even *Aſcites's*, eſpecially if mixed with *Salt of Steel*. I take it likewiſe to be an excellent Medicin in *Lowneſs of Spirits*, and moſt *nervous* Diſorders; and hence it is, I cannot too earneſty recommend its Uſe to the tender, delicat, and *nervous* old Man, in order to procure him the Bleſſing of a *Green Old Age*, as far as *Art* and *Medicin* can contribute to it. *Miſleto* of the *Oak*, dried *Orange-peel*, *Cinamon*, *Japan* Earth, (and ſome other vegetable *Aſtringents*) are found to have ſomething in them of the Nature of the *Bark*, but in Virtue and Efficacy are greatly inferior to it.

24. LASTLY, The *Reader* muſt excuſe me, whilſt I ſpeak my Perſuaſion, that nothing will more effectually contribute towards the

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Felicity of a *Green Old Age*, than innocent and entertaining *Amuſements*, engageing and light Studies, and rational *Diverſions* in a chearful and affectionat Society; above all, a *clear Conſcience*, *beneficent Temper*, *peaceful Reſignation*, and well-grounded *Hope*, which

Summum nec metuat diem, nec optet.

THOUGH many of the Directions given in this *Chapter* are adapted to Men of *Fortune* only, yet thoſe who are not ſuch, may poſſibly herein diſcover ſome *Rules* of Liveing advantageous in themſelves, and at the ſame time practicable without Expence. Let the Man who is really poor, take care to avoid the Inconveniencies of the Non-naturals; and his very *Poverty*, by confining him to a low, thin *Diet*, may probably procure for him the Bleſſing of long Life, and a *Green Old Age*.

TO conclude; I cannot but hope, that Perſons of *all Ranks* and Conditions may, by a ſerious Attention to theſe *Rules*, make ſome Diſcoveries, which may aſſiſt in conveying them, without violent *Shocks*, through a State of *Miſery* and *Probation*.

25. I HAVE above obſerved, that to prolong a *Green Old Age*, nothing was more conducive than the Firmneſs of the Bowels, and a due natural Coſtiveneſs, at leaſt of *figur'd Stools*; but ſince a *Diarrhœa* may hap-

pen from caſual *Exceſſes*, *Colds*, or *Epidemical* Diſtempers, to ſuch, which not only carries off the *Nouriſhment* and *Spirits*, but, if continued, will endanger the Life of an *old Man*, I have therefore reſerved the Cure of it to this Place.

A Diarrhoea.

A DIARRHOEA, Flux, or *Chronical* Looſeneſs, if it is ſimple, and not *Symptomatic*, ariſes from an imperfect *Digeſtion*, or a bad *Chylification*; the *laſt* from *viſcid* Juices, ſo ſtuffing the *Blood-veſſels*, that they will admit little or no new *Chyle*; the *firſt* from a *Relaxation* of the Solids, whereby the *Chyle* not being ſufficiently *thinn'd* or *mill'd*, cannot paſs the *Lacteals*; and ſo ſtagnating in the *Primæ Viæ*, there acidulats, and turns into the Nature of an *active Purge*. This is the Caſe with a ſimple and primary *Diarrhœa*; the *Symptomatic* may ariſe from many Cauſes, a ſlow *Fever*, a *ſcorbutic* Habit, any *topical* Diſtemper tranſlated, as the *Gout*, *Rheumatiſm*, or *Eriſypelas*. This laſt kind of *Diarrhœa* can never be totally cured, till the primary and original Diſtemper be firſt remedied, and ſo it becomes a ſimple uncomplicated *one*; juſt as an *Ulcer* can never be cured, till by proper *Alteratives* it be made a ſimple *Wound*. For the *Cure* of a ſimple *Diarrhœa* then, nothing is ſo effectual as frequent *Vomits*, both to cleanſe the *Primæ Viæ*, that the digeſtive *Organs* may have their proper

proper Play, as alſo to withdraw and *revulſe* the *peccant* Humours from the *relax'd Bowels*, and to cleanſe them, Powders of toaſted *Rhubarb*, prepared *Coral*, with a few Grains of toaſted *Nutmeg*, in ſmall *Doſes*, waſh'd down with tepid *Briſtol-water*, or the white Drink, Teas of *Bark*, *Cinamon*, *Miſleto*, and *Orange-peel*, four Spoonfuls twice a Day, on an empty Stomach; but above all takeing ſpecial Care of the *Diet*, which ought to be the *lighteſt*, and moſt eaſily digeſtible, *Rice*, *Sago*, *Biskets*, and the ſeveral ſorts of *Seed-meats*, made with Milk or Water, little at a time, but oftener: All kinds of Exerciſes the Patient can bear, and firſt *Briſtol*, then *Spa* or *Pyrmont* Water for Beverage, with a little *ſpiced Claret*. This Method will do, if any thing can, if the Conſtitution be tolerably *good*, even though *tender*.

The CONCLUSION.

IT may be very juſtly and reaſonably ſuppoſed, that all, eſpecially duely cultivated or ſenſible *Patients*, already know and are convinced (at leaſt in the main) of the *general Truths* here laid down, about the *Cure* of *Diſtempers*. Scarce an *Apothecary's Apprentice*, but can tell, that proper *Evacuations*, *mild Alteratives*, and *gentle Bracers*, orderly purſued, and duely continued, are the moſt effectual Means and Medicins to cure the *Diſeaſes* of the Body, and the *Anxieties* of the Mind, that are the Conſequences of ſuch bodily Diſeaſes; and no conſidering Patient, but is convinced, that if he could but moderat his *Appetites*, and ſtick to the *Lighteſt* and the *Leaſt* he is tolerably eaſy under, he would in time get rid of his *Diſeaſes* and *Complaints*; that is, at leaſt, he could thereby ſtarve them away in time; ſo that what I have ſo ſtrenuouſly and perpetually inculcated about *Abſtinence*, Faſting, or the *Lighteſt* and the *Leaſt*, is all *Labour in Vain*, and mere *jejune Repetition*. The *ſole Queſtion* in *Phyſic*, it ſeems, and which alone ought to be the Subject of a ſenſible *Phyſician's* Study and *Inquiry*, is, How, takeing Mankind and the World as they actually are, with their preſent *Ignorance*, *Appetites*, *Paſſions*, *Luxury* and *Intemperance*, which they will not forego, even

even under the Terrors of eternal Puniſhments, it is poſſible to cure or relieve them of their *Diſeaſes* and *Complaints*, the ſooneſt and moſt effectually. Some from their *Situation* in Life, their *Employments* and other Circumſtances, may find the *Rules* I have laid down for the ſo tedious Recovery of Health, extremely inconvenient and difficult to practiſe. Others from the *Violence* and the painful *Craveings* of their Appetites, Paſſions, Habits, and the Cuſtoms of the Country, will be extremely averſe to cure their Complaints in the *Manner* I propoſe. To both ſuch I might juſt as well have ſaid nothing at all, as to have recommended ſo impracticable and diſagreeable a Manner of *Cure*. To theſe, all I have to anſwer, is, 1*ſt*, I have ſuggeſted the moſt effectual and quickeſt *Remedies* and *Medicins* to me known, and choſen after the *experimental Refuſal* of a Thouſand others, ſaid to be of the ſame Intention, under the preſent common *Regimen*, and faſhionable Manner of practiſeing Phyſic; and ſo have anſwered the *firſt* Condition; but without promiſeing a *ſolid* and dureable *Cure* in ſuch Circumſtances. 2*dly*, That taking in all the *Conditions* propoſed, they make it an impoſſible *Problem*; and with as much Reaſon they might require the *Quadrature* of the *Circle* in *integral Numbers*, or a *perpetual Motion*. *Health* and *Luxury* are incompatible: Strong Fibres and Nerves, and *immoderat*

derat Lechery, are *contradictory*. Long Life and continued *Intemperance*, in the Nature of Things, are impoſſible. *Phyſicians* under ſuch Conditions, by ſtrong and repeated *Evacuations*, and violent *Aſtringents* and *Bracers* alternatly preſcribed, may keep up the *Patient* for a while, but that even poorly and precariouſly; and at the ſame time, and by theſe very Means, they precipitat the *Patient's Fate*. The Propoſition I laid down to myſelf to prove, was, That Men, in a great meaſure, had the *total Cure*, at leaſt a great Degree of the *Alleviation* of their Miſeries, in their own Power; all, but that one of *Hunger* perhaps, or *Simplicity* of Diet, which cannot come to any very painful *Extreme* in this Iſland. To *bear* and *forbear*, is all that is abſolutely neceſſary in this *Life*, to make a Man tolerably eaſy; and his Pain and Suffering cannot have riſen to any *great Height*, who will not ſubmit to this. I have labour'd to ſhew in this *Treatiſe*, by going through moſt of the common Diſtempers, *Acute* and *Chronical*, *Epidemical* and *Cephalic*, the *Evacuations*, *Alteratives*, and *Bracers*, proper to alleviat them, without any Conſideration of a particular *Regimen*; and to extirpat them, have added the *ſpecific Regimen*. If this will not give Content, we muſt conclude from this Appearance, as it neceſſarily follows from many others, that *Pains*, *Suffering*, and *Diſeaſes*, are neceſſary

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in the *Oeconomy* of *Providence*, to make Men virtuous, in order to become afterwards happy; and that *Omnipotence* and *Omniſcience* has choſen this *Mean*, as the moſt effectual to bring them to this State at laſt. So that all Endeavours, however *reaſonable*, to ſteer any other Courſe, will be vain, till the *Sufferings* are more *exaſperated*, as in the *torturing Engines* there are requir'd a *Turn* or two more of the *Screws* to make the Criminal ſpeak *out* the Whole. For my own Part, neither my *Conſtitution*, the natural *Tenderneſs* of my *Nerves*, my *Habitudes*, nor even my *Conſcience*, would permit me to ſee my Fellow-Creatures in *Pain* and *Miſery*, without contributeing all in my Power to their *Relief*. Abſolute *Reſignation*, nay inward Contentment and Joy, in the infinitly wiſe and perfect Will of GOD in all things, *proſperous* or *adverſe*, I know is my *Duty*, is a State I admire, and ought to *aſpire* after. But I am ſenſible I am very far from it at preſent, and I fear I could not be perfectly happy in any *Place*, as I now feel myſelf, if I certainly knew, that any of my Fellow-Creatures were to be *eternally* miſerable *anywhere*. I have therefore done my *beſt*, and I believe my *laſt*, in *Phyſic*: I think I have *demonſtrated* from the *Nature* of Things, from the *Writeings* of ſome of the *beſt Phyſicians*, my own *long Experience*, by running through all the commonly deſcribed *Diſtempers*, that

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the Means and Methods I *propose*, will either *eradicat*, or greatly *relieve* them; and though the Method be *slow*, and somewhat *self-denying*, yet *Custom* will make it still easier, and the *Health* and *Spirits* arising from it will in time make it *pleasant*; and in very bad and painful Cases, it will be some *Consolation*, and give the desponding Patient a great deal of *Courage* and *Spirit*, to *know* there is still a *Method* remaining, that has the greatest Probability to *cure*, *relieve*, or lay the suffering Person easily *down*, that has not yet been commonly prescribed, nor sufficiently enforced: For I am *morally* certain, and am *myself* intirely convinced, that a *Milk and Seed*, or *Milk and Turnep* Diet, duely persisted *in*, with the occasional Helps mentioned on *Exacerbations*, will either *totally cure*, or greatly *relieve*, every *Chronical* Distemper I ever saw or read of; and plentiful *Dilution*, (with proper Evacuation of the several kinds premised) with *Teas* made of the *saponaceous*, or *aromatic Seeds*, in their Order, will bid fairest to cure all cureable *Acute* ones I know.

F I N I S.

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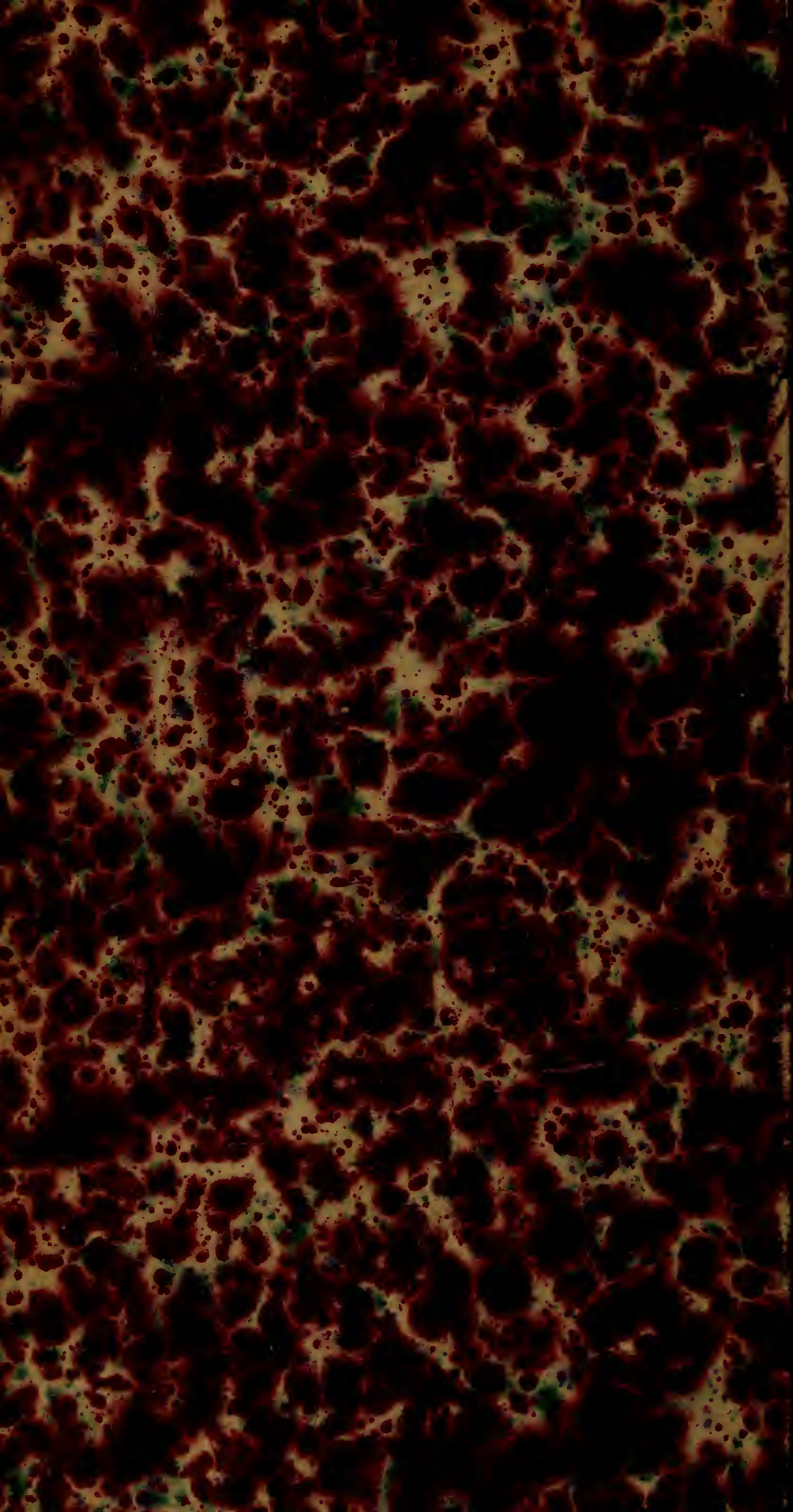
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